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UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
in cooperation with
STATE AGRICULTURAL EXPERIMENT STATIONS

COMPARISON OF
WINTER WHEAT VARIETIES GROWN IN COOPERATIVE
NURSERY EXPERIMENTS IN THE
HARD RED WINTER WHEAT REGION
IN 1988

C. J. Peterson
Research Agronomist

This is a joint progress report of cooperative investigations under way in the State Agricultural Experiment Stations and the Agricultural Research Service of the U. S. Department of Agriculture containing preliminary data which have not been sufficiently confirmed to justify general release. Interpretations may be modified with additional experimentation. Confirmed results will be published through established channels. The report is primarily a tool for use of cooperators and their official staffs and for those persons having direct and special interest in the development of agricultural research programs.

The report includes data furnished by the State Agricultural Experiment Stations as well as by the Agricultural Research Service and was compiled in the Central States Area, U. S. Department of Agriculture. The report is not intended for publication and should not be referred to in literature citations nor quoted in publicity or advertising. Use of the data may be granted for certain purposes upon written request to the agency or agencies involved.

Lincoln, Nebraska
March, 1989

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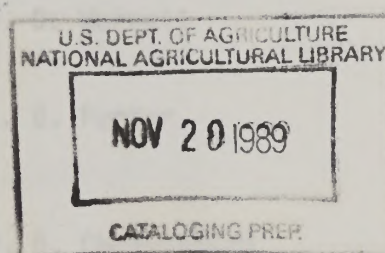
COMPARISON OF WINTER WHEAT VARIETIES GROWN IN COOPERATIVE
NURSERY EXPERIMENTS IN THE HARD RED WINTER WHEAT REGION
IN 1988

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C. J. Peterson



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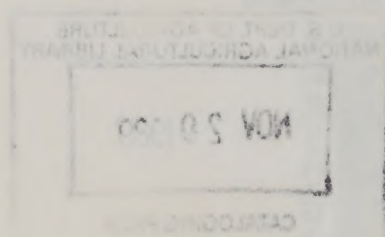
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Agriculture

The writer expresses appreciation to Joyce Kovar for assistance in preparing this report.

UNITED STATES DEPARTMENT OF AGRICULTURE
 AGRICULTURAL RESEARCH SERVICE
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COMPARISON OF WINTER WHEAT VARIETIES GROWN IN CALIFORNIA
 WINTER EXPERIMENTS IN THE HARD RED WINTER WHEAT REGION
 IN 1968



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The writer expresses appreciation to Jack Kuhn for assistance in preparing this report.

COOPERATING AGENCIES, STATIONS, AND PERSONNEL
(The asterisk denotes USDA employees)

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E. J. Souza

Aberdeen Branch Station

E. J. Souza

Rockland

WASHINGTON AGRICULTURAL EXPERIMENT STATION:

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Dry Land Research Unit

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REGIONAL NOTES

The 1988 Hard Red Winter Wheat Breeders field day was held on June 9th at the University of Nebraska Agronomy Farm in Lincoln, Nebraska. Cooperators also visited a Pioneer wheat nursery near Beatrice.

The 1989 Breeders Field Day is to be held at Stillwater, OK in late May.

The 18th Hard Red Winter Wheat Workers Conference was held on January 31 through February 2, 1989 at Dallas, Texas. Proceedings from the conference will be available in the near future through Dr. David Marshall, Texas A&M, Dallas.

Dr. Owen Merkle, Research Geneticist with the USDA/ARS at Stillwater, OK retired on December 31, 1988. Dr. Merkle accepted a position with MIAC Morocco project and is now stationed in Settat, Morocco as an Agronomist.

Dr. Kenneth Porter, Texas A&M Wheat Breeder stationed at Bushland, TX, retired in August of 1988. A replacement has not been named at this time.

Dr. A. D. Hewings was hired in 1988 by the USDA-ARS at Urbana, Illinois, replacing Dr. H. Jedlinski in small grains virology research efforts.

NOTE: The response reaction of entries to leaf and stem rust infection has been coded on a 1-9 scale to facilitate generation of this report. This same scale has been used in past reports. The response data can be interpreted as follows:

| <u>Response scale</u> | | <u>Reaction type</u> |
|---------------------------|---|--------------------------|
| 1 | - | VR |
| 2 | - | R |
| 3 | - | MR |
| 4 | - | M |
| 5 | - | M |
| 6 | - | M |
| 7 | - | MS |
| 8 | - | S |
| 9 | - | VS |

NEW VARIETIES AND GERMPLASM

The following is only a partial list of new wheat varieties and germplasms available in the region. Included are those for which we have current information.

VARIETIES

The Kansas Agricultural Experiment Station and the USDA/ARS have announced the release of the hard red winter wheat variety 'Karl' (P.I. 527480). Karl was tested in the 1986 and 1987 SRPN as KS831374 and originates from the cross Plainsman V/3/Kaw/Atlas 50//Parker*5/Agent. Karl possesses excellent milling and baking qualities with grain protein concentrations approximately 1% higher than Eagle or 2% higher than Newton. Karl is resistant to soilborne mosaic and spindle streak mosaic viruses and provides excellent protection against leaf rust and tan spot.

The Colorado Agricultural Experiment Station has announced the release of the hard red winter wheat variety 'Lamar'. Lamar was tested in the 1987 and 1988 SRPN as C0820009 and originates from the cross 74F878/Wings//Vona. Lamar is a conventional medium height wheat with excellent quality. Lamar has shown significant tolerance to water stress and ability to fill grain under drought stress conditions. It is targeted for production in southeast Colorado.

Nickerson American Plant Breeders has announced the release of four winter wheat varieties:

'Bronco' is a hard red winter wheat derived from the cross Payne/W87-069. Bronco is a medium maturity, tall semidwarf with adaptation to the major wheat growing areas of Colorado, Kansas, Oklahoma, northern Texas, and southern Nebraska. Bronco was tested in the 1988 SRPN as NA-W83-256

'Rio Blanco' is a hard white winter wheat derived from the cross OK1125A/W76-1226. It is similar in many respects to its sister line Mesa but differs in that it is recessive for all three alleles for red seed coat. Rio Blanco is a medium maturity, short to intermediate height semidwarf with adaptation to the major wheat growing areas of Colorado, Kansas, Oklahoma, northern Texas, and southern Nebraska. Rio Blanco was tested in the 1988 SRPN as NA-W81-162W.

'Sierra' is a hard red winter wheat derived from the cross W79-227/Payne. Sierra is a medium maturity, intermediate height semidwarf with adaptation to Kansas, southern Nebraska, eastern Colorado, and the Oklahoma and Texas panhandle irrigated areas. Sierra was tested in the 1988 SRPN as NA-W84-229.

'Waco' is a hard red winter wheat derived from the cross W77-355/MN70113. Waco is a very early maturity, intermediate height semidwarf with primary adaptation to the north-central and northeastern portions of Texas. Waco was tested under the experimental designation W83-253.

1988
Southern Regional Performance Nursery

| <u>Entry No.</u> | <u>Variety or Pedigree</u> | <u>Sel. No.</u> | <u>Source</u> |
|------------------|---|-----------------|---------------|
| 1** | Kharkof | CI1442 | Check |
| 2** | Scout 66 | CI13996 | " |
| 3** | TAM-105 | CI17826 | " |
| 4 | Aurora/2*TAM W-101 | OK84343 | Oklahoma |
| 5* | Payne*2/C0725052 | OK84286 | " |
| 6* | " " | OK84287 | " |
| 7* | Hawk/OK80099 | OK86197 | " |
| 8* | OK79257/Century Sib/2/Chisholm | OK86215 | " |
| 9 | TAM W-101*4/Amigo*4//Largo | TXGH10989 | Texas |
| 10 | Sturdy*3/Amigo | TX81V6582-2 | " |
| 11 | TAM-105*4/Amigo*4//Largo | TXGH10563B | " |
| 12 | KS73146/TX71A1039 | TX84V1336 | " |
| 13 | TX71A562-6*4/Amigo*4//Largo | TXGH13622 | " |
| 14 | TX71A374-4/TX71A1039-V1 | TX84V1317 | " |
| 15 | TX71A1039-V1*3/Amigo | TX81V6607-2 | " |
| 16* | TAM-106 resel./TX69D4819 | TX84V1736 | " |
| 17* | TAM-108/Arkan | TX86A7041 | " |
| 18* | Rannaya/NE701136//CI13449/Ctk | TX86V1109 | " |
| 19* | " " | TX86V1110 | " |
| 20 | 74F878/Wings//Vona | C082009 | Colorado |
| 21 | 74cb462/Trapper//Vona | C0830027 | " |
| 22 | C05926//7C/Tobari 63/3/Baca | C0830034 | " |
| 23* | 74cb452/Vona//Baca | C0830014 | " |
| 24 | Bison/Sterling//3*Scout/3/Eagle/4/ Pinnacle/2*Eagle | KS84HW196 | Kansas |
| 25 | Bulk Selection | KS82C2338 | " |
| 26 | KS73167/Agate//Sage sib | NE82533 | Nebraska |
| 27* | Wrr/Sut//MoW6811/3/Agate Sib/4/NE68457/Ctk78 | NE84557 | " |
| 28* | CIMMYT/Scout//Bennett Sib/4/Parker*4/Agent //Belot.198/Lcr/3/Bez 1/Ctk78 | NE83407 | " |
| 29*** | Brule/3/Parker*4/Agent//Belot.198/Lcr | NE82656 | " |
| 30* | Winter Wheat Line | RL844677 | Rohm & Haas |
| 31* | Winter Wheat Line | RL845472 | " |
| 32* | HRW Selection | AGC-112 | Seed Research |
| 33* | " " | AGC-113 | " |
| 34 | Bezostaya/TAM W-101//W558 | XW141 | Pioneer |
| 35* | TAM W-101/W603//W558 | XW161 | " |
| 36* | Winter Wheat Hybrid | XH675 | HybriTech |
| 37* | " " | XH685 | " |
| 38** | Bounty Hybrid Wheat | Bounty-122 | Cargill |
| 39* | " " | WH180001 | " |
| 40* | W79-227/Payne | NA-W84-229 | NAPB |
| 41* | Payne/W78-069 | NA-W83-256 | " |
| 42* | OK11252A/W79-1226 | NA-W81-162-W | " |
| 43* | IL77-4259/IL76-3845 | IL83-7439 | Illinois |
| 44* | TX69A330/IL76-3820 | IL80-1251 | " |
| 45* | CHA Hybrid Mustang/3/T-105*4/Amigo*4//Largo, TXGH10287 | TX87HA1 | Texas |

* New Entry in 1988, ** New Seed Provided, *** Entered from NRPN

TEST SITE INFORMATION - SRPN

Clovis, NM -- The dryland nursery was planted on 9/22/87 at a rate of 35 lbs/a. Fertilizer was applied preplant incorporated at a rate of 21 lbs/a nitrogen and 43 lbs/a phosphate.

The irrigated nursery was planted on 10/6/87 at a rate of 70 lbs/a. Fertilizer was applied preplant incorporated at a rate of 129 lbs/a nitrogen and 43 lbs/a phosphate.

Precipitation for August and September was above normal with 9.95 inches occurring in August. The following six months received below normal precipitation totaling only 2.03 inches. Harvest was delayed due to heavy rains in May and June (17.46 inches).

An infestation of Russian wheat aphid reached economic threshold levels by April 11, 1988. An application of 0.5 lbs/a a.i. Dimethoate was used to control the aphid. Leaf rust did not appear until hard dough stage and occurred at higher levels on the irrigated nursery. It did not, however, seem to affect yields. No other diseases were detected during the growing season.

Farmington, NM -- The nursery was sprayed two times in fall and spring for Russian wheat aphid control.

Bushland, TX -- The irrigated nursery was fertilized on 9/28/87 with 155 lbs/a N ammonium sulfate and sown on 10/20/87 at 65 lbs/a or 73 kg/ha. It was irrigated with 3.5 acre inches on 4/12/88, 5/2/88, and 5/18/88 followed by 2.39 inches of rainfall on 5/31/88. The low test weight of entries was not well explained. Failure to control Russian aphids late in the fruiting period may have been a contributing factor. Yellowing of some entries at heading suggested barley yellow dwarf infection but wheat streak or other viruses could be involved. Symptoms were not definitive.

The dryland nursery was sown on 10/6/88 at 32 lbs/a or 36 kg/ha. The nursery was ground sprayed with 1/3 oz/a Glean on 3/21/88 to control weeds. It was not fertilized. September rainfall was more than twice normal and December precipitation in the form of snow was almost three times normal. January through March was slightly below normal precipitation while April and May was 2.25 inches above normal.

Both nurseries were airplane sprayed with 1/2 lb/a Dimethoate for Russian aphid and greenbug control on 3/19/88 and 4/12/88.

Chillicothe, TX -- No information.

Dallas, TX -- A total of 100/46/0 lbs/a fertilizer (N/P/K) was applied. Emergence was delayed about 10 days due to dry conditions. There was good moisture from January through March with essentially no rains during April or May. Conditions were good for development with the highest yields in the Central Texas Blacklands in the past ten years and disease severities were relatively low.

Stillwater, OK -- There were near adequate soil moisture levels and mild temperatures throughout most of the season and no significant freeze damage. A uniform infection of barley yellow dwarf virus probably caused yield reductions in susceptible cultivars.

Lahoma, OK -- Temperatures were mild and soil moisture was adequate through most of the season. There was no significant disease or insect damage and no freeze damage.

Altus, OK -- Temperatures were mild and soil moisture better than average through most of the season for this location. A heavy leaf rust infection was present on susceptible cultivars. There was no significant freeze damage.

Goodwell, OK -- The nursery was pre-irrigated on 9/23/87 and irrigated on 3/23/88 and 5/10/88. Temperatures were mild throughout most of the season. There was no significant disease or insect damage and no freeze damage.

Hutchinson, KS -- The nursery was completely wiped out by wheat streak mosaic virus. Performance is an indication of tolerance to this disease.

Manhattan, KS -- Relatively good conditions and timely rains provided better than expected yields. A late, heavy infection of leaf rust influenced filling and reduced yields of susceptible cultivars.

Hays, KS -- Soil conditions in the fall were dry, however within three days of planting the nursery received 0.35 inches of rain which allowed for fairly uniform stands. Fall and winter growth was very limited. Winter survival was good. The nursery received 1.35 inches of rain on April 1, but no additional effective rainfall was received. Flowering dates were about average for the area but hot, dry conditions resulted in an early harvest date. Diseases and insects were not a factor in this test.

Garden City, KS -- The growing season ranged from normal to dry conditions. There was no disease pressure other than wheat streak mosaic virus and a late minor infection of leaf rust. Wheat streak mosaic virus adversely affected yields.

Colby, KS -- The nursery was abandoned due to poor stands. Planting conditions were very dry.

Ft. Collins, CO -- Nursery abandoned due to poor stand establishment.

Akron, CO -- No information.

Burlington, CO -- No information.

Walsh, CO -- Nursery abandoned due to hail damage.

Julesburg, CO -- No information.

Lincoln, NE -- The nursery was planted at a near optimal date with adequate fall and spring moisture. Winterkilling was a minor problem. Despite a generally dry and hot early summer, timely rains prevented drought stress. Leaf rust was prevalent.

Clay Center, NE -- The nursery was planted at a near optimal date with adequate fall and spring moisture. Winterkilling was a minor problem. Severe drought and heat during grain filling limited yields.

North Platte, NE -- The nursery was planted at a near optimal date with below adequate fall moisture. Winterkilling was a minor problem. Stands were very irregular with plot border rows failing to emerge as well as the center rows. Early spring moisture was ideal for the spread of *Cephalosporium* stripe which differentially affected the cultivars. Grain filling was abruptly ended by heat and wind with some lines dying green. Data are not reported due to variability in emergence.

Sidney, NE -- The nursery was abandoned due to hail.

Alliance, NE -- The nursery was planted at a near optimal date with adequate fall and spring moisture. Winterkilling was a minor problem. Adequate moisture was present during grain filling. A fertility gradient was present in the field which increased plot variability.

Brookings, SD -- The nursery was seeded on 9/11/87 into good moisture. Flax was planted as a snow-catch crop. A mild winter with adequate snow cover allowed 100% survival. An early, hot, dry spring and summer reduced yield potential. No disease or insect problems. Harvested on 7/5/88.

Presho, SD -- Seeded on 9/8/87 into fallowed ground with adequate moisture. A mild winter allowed for 100% survival. There were heavy fall infestations of wheat curl mite and R. Padi. The spring and summer were extremely hot and dry. WSMV and BYDV were very evident. Notes were taken on general plant appearance. Harvested on 7/6/88.

Casselton, ND -- The nursery was planted on 9/9/87. Less than 50% winter survival was recorded for most plots. Dry conditions were experienced from planting through harvest with less than 40% of normal precipitation received from April through July.

Columbia, MO -- No information.

Ames, IA -- The nursery was planted on 9/23/87 and emerged on 9/30/87. Fall moisture and growth was adequate. There was heavy winterkill on non-hardy cultivars. A dry spring and high temperatures in the early summer shortened plant growth. Plants ripened about 10 days ahead of normal with very little disease evident. Grain was bright, clean, and reasonably plump. Yields were fairly good despite low moisture and rapid growth.

Urbana, IL -- Soil moisture was good at planting and fall stands were excellent. Winter temperatures were fairly mild with snow cover during part of the winter. Most plots had excellent stands in the spring. Rainfall from January through harvest was below normal. Conditions became progressively drier throughout the season and diseases did not develop.

Lind, WA -- The fall was very dry with poor moisture conditions and poor emergence. The winter was mild with little moisture. Spring conditions were cool and moist with above normal precipitation in March, April and May.

Aberdeen, ID -- A total of 200 lb/a N and 40 lbs/a P were applied to the nursery. There were low levels of rainfall and snowfall for the crop season and hot summer temperatures. A total of 190 mm irrigation was applied. A slight leaf rust infection occurred late in the season. Planted on 9/25/87 and harvested 8/19/88.

Table 1. Yield and agronomic data for 45 entries in the Southern Regional Performance Nursery in 1988.

CLOVIS (IRR.)

NEW MEXICO

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1 : | : LEAF RUST : : SEV.:RESP : : % : 0-9 : |
|---------------------|------------------------|------------------------|---------------------------------------|-----------------------------------|--|---|
| TXGH13622 | 13 | 7176 | 71.5 | 80 | 134 | 9 |
| TXGH10563B | 11 | 7081 | 70.3 | 80 | 130 | 7 |
| AGC-112 | 32 | 6835 | 68.9 | 82 | 131 | 4 |
| CI17826 | 3 | 6348 | 69.6 | 79 | 133 | 8 |
| OK84286 | 5 | 6326 | 69.1 | 83 | 134 | 10 |
| XH675 | 36 | 5940 | 68.5 | 86 | 135 | 4 |
| RL844677 | 30 | 5880 | 72 | 83 | 137 | 4 |
| OK84287 | 6 | 5858 | 69.1 | 79 | 133 | 7 |
| C0830027 | 21 | 5841 | 70.6 | 86 | 134 | 10 |
| TXGH10989 | 9 | 5762 | 68.8 | 77 | 133 | 7 |
| TX84V1317 | 14 | 5739 | 71 | 78 | 131 | 4 |
| XW161 | 35 | 5691 | 67 | 72 | 130 | 2 |
| WH180001 | 39 | 5640 | 68.3 | 81 | 134 | 4 |
| OK84343 | 4 | 5625 | 68.8 | 75 | 134 | 1 |
| TX84V1336 | 12 | 5617 | 68.8 | 79 | 130 | 4 |
| NE84557 | 27 | 5536 | 71 | 79 | 137 | 15 |
| OK86215 | 8 | 5483 | 71.3 | 82 | 131 | 4 |
| OK86197 | 7 | 5471 | 67.7 | 82 | 130 | 4 |
| TX86V1110 | 19 | 5442 | 66.8 | 87 | 133 | 1 |
| C0830014 | 23 | 5420 | 71 | 89 | 135 | 9 |
| Bounty-122 | 38 | 5419 | 65.2 | 83 | 134 | 12 |
| NA-W84-229 | 40 | 5389 | 68.5 | 77 | 135 | 2 |
| TX87HA1 | 45 | 5331 | 70.5 | 79 | 132 | 15 |
| NA-W83-256 | 41 | 5323 | 68.3 | 79 | 136 | 4 |
| KS82C2338 | 25 | 5248 | 71.1 | 75 | 130 | 5 |
| C0830034 | 22 | 5236 | 70.3 | 80 | 137 | 5 |
| TX84V1736 | 16 | 5139 | 69.2 | 74 | 130 | 7 |
| NA-W81-162-W | 42 | 5098 | 69.2 | 77 | 133 | 4 |
| IL80-1251 | 44 | 5095 | 69.3 | 77 | 137 | 4 |
| XH685 | 37 | 5042 | 67.2 | 83 | 134 | 2 |
| CI13996 | 2 | 4907 | 69.4 | 87 | 134 | 8 |
| TX81V6607-2 | 15 | 4870 | 71.9 | 72 | 131 | 1 |
| NE82533 | 26 | 4756 | 69.8 | 78 | 137 | 4 |
| NE82656 | 29 | 4722 | 64.9 | 77 | 137 | 1 |
| TX86V1109 | 18 | 4585 | 67.4 | 83 | 134 | 2 |
| TX81V6582-2 | 10 | 4506 | 70.4 | 69 | 130 | 5 |
| NE83407 | 28 | 4432 | 65.2 | 76 | 137 | 4 |
| TX86A7041 | 17 | 4407 | 65 | 72 | 135 | 1 |
| XW141 | 34 | 4387 | 66 | 71 | 136 | 1 |
| RL845472 | 31 | 4122 | 67.9 | 90 | 138 | 4 |
| AGC-113 | 33 | 3985 | 64.4 | 77 | 137 | 5 |
| KS84HW196 | 24 | 3911 | 70.1 | 76 | 130 | 1 |
| CI1442 | 1 | 3833 | 69.3 | 96 | 144 | 5 |
| C082009 | 20 | 3775 | 69.2 | 82 | 137 | 13 |
| IL83-7439 | 43 | 3765 | 66.1 | 79 | 136 | 2 |
| MEAN | | 5244 | | | | |
| LSD(.05) | | 1202 | | | | |
| C.V. | | 14.0 | | | | |

CLOVIS (DRYL.)
NEW MEXICO
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD : KG/HA | : VOLUME : WEIGHT : KG/HL | : PLANT : HEIGHT : CM | : DAYS TO : HEADING : FROM 1/1: | : LEAF RUST: : SEV.:RESP: : % : 0-9: |
|---------------------|--------------------|--------------------|---------------------------------|-----------------------------|---------------------------------------|--|
| TXGH10563B | 11 | 3257 | 73.9 | 64 | 125 | 27 |
| TX87HA1 | 45 | 2970 | 75.7 | 68 | 129 | 27 |
| TXGH13622 | 13 | 2922 | 73.7 | 57 | 130 | 4 |
| CI17826 | 3 | 2666 | 72.1 | 64 | 127 | 23 |
| CI13996 | 2 | 2567 | 72.2 | 71 | 130 | 1 |
| XH675 | 36 | 2456 | 71.3 | 64 | 130 | 2 |
| RL845472 | 31 | 2338 | 73 | 65 | 129 | 2 |
| OK84287 | 6 | 2265 | 71.3 | 60 | 129 | 4 |
| TXGH10989 | 9 | 2170 | 70.6 | 60 | 129 | 9 |
| TX84V1336 | 12 | 2069 | 72.9 | 56 | 125 | 1 |
| AGC-112 | 32 | 2044 | 72.8 | 58 | 128 | 22 |
| TX84V1317 | 14 | 2033 | 72.4 | 56 | 129 | 1 |
| IL80-1251 | 44 | 1994 | 72.4 | 59 | 130 | 2 |
| TX81V6607-2 | 15 | 1980 | 75.5 | 57 | 128 | 5 |
| C0830014 | 23 | 1945 | 73.6 | 64 | 130 | 7 |
| C082009 | 20 | 1849 | 73.4 | 63 | 134 | 7 |
| OK84286 | 5 | 1743 | 71.3 | 57 | 130 | 1 |
| TX86A7041 | 17 | 1728 | 66.5 | 59 | 130 | 1 |
| TX84V1736 | 16 | 1700 | 71.9 | 54 | 125 | 4 |
| OK86215 | 8 | 1677 | 71.8 | 59 | 128 | 5 |
| OK84343 | 4 | 1629 | 69.9 | 57 | 130 | 4 |
| TX86V1109 | 18 | 1601 | 68 | 69 | 129 | 1 |
| TX81V6582-2 | 10 | 1579 | 72.2 | 57 | 126 | 7 |
| NA-W83-256 | 41 | 1578 | 69.9 | 59 | 131 | 2 |
| TX86V1110 | 19 | 1538 | 66.6 | 67 | 129 | 11 |
| WH180001 | 39 | 1531 | 69.3 | 62 | 131 | 7 |
| C0830027 | 21 | 1521 | 72.2 | 58 | 129 | 2 |
| XH685 | 37 | 1483 | 71.1 | 59 | 130 | 4 |
| KS84HW196 | 24 | 1455 | 72.1 | 57 | 127 | 1 |
| NE84557 | 27 | 1414 | 72.6 | 56 | 131 | 1 |
| C0830034 | 22 | 1384 | 72.7 | 58 | 134 | 14 |
| NA-W81-162-W | 42 | 1346 | 69.9 | 53 | 130 | 2 |
| RL844677 | 30 | 1342 | 72 | 59 | 135 | 1 |
| OK86197 | 7 | 1198 | 69.4 | 56 | 129 | 1 |
| Bounty-122 | 38 | 1146 | 67.4 | 55 | 130 | 7 |
| CI1442 | 1 | 1126 | 65.9 | 76 | 144 | 14 |
| NA-W84-229 | 40 | 1113 | 70 | 48 | 131 | 1 |
| KS82C2338 | 25 | 1110 | 70.7 | 58 | 129 | 14 |
| NE83407 | 28 | 974 | 67.5 | 52 | 135 | 2 |
| NE82656 | 29 | 973 | 68.2 | 58 | 134 | 4 |
| IL83-7439 | 43 | 871 | 67.6 | 58 | 130 | 1 |
| AGC-113 | 33 | 868 | 66.2 | 58 | 135 | 4 |
| NE82533 | 26 | 831 | 69.1 | 55 | 133 | 11 |
| XW141 | 34 | 697 | 61.4 | 53 | 133 | 1 |
| XW161 | 35 | 678 | 67.2 | 49 | 123 | 1 |

| | |
|----------|------|
| MEAN | 1675 |
| LSD(.05) | 987 |
| C.V. | 36.1 |

FARMINGTON
NEW MEXICO
FOUR REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD : KG/HA | : VOLUME : WEIGHT : KG/HL | : PLANT : HEIGHT : CM | : DAYS TO : HEADING : FROM 1/1: |
|---------------------|--------------------|--------------------|---------------------------------|-----------------------------|---------------------------------------|
| TX86A7041 | 17 | 8006 | 75.8 | 90 | 139 |
| XH685 | 37 | 7141 | 77.4 | 102 | 137 |
| AGC-113 | 33 | 7038 | 75.1 | 100 | 139 |
| NA-W84-229 | 40 | 6965 | 77.7 | 85 | 137 |
| XH675 | 36 | 6950 | 77.7 | 99 | 136 |
| RL844677 | 30 | 6833 | 78 | 105 | 139 |
| C0830027 | 21 | 6789 | 79 | 99 | 136 |
| C0830034 | 22 | 6745 | 79 | 103 | 137 |
| TX84V1336 | 12 | 6569 | 77.4 | 84 | 133 |
| XW141 | 34 | 6510 | 77.1 | 85 | 137 |
| CI17826 | 3 | 6349 | 76.4 | 91 | 135 |
| TXGH10563B | 11 | 6334 | 74.8 | 92 | 134 |
| C082009 | 20 | 6334 | 79 | 101 | 139 |
| TX81V6607-2 | 15 | 6305 | 77.1 | 81 | 135 |
| TX84V1317 | 14 | 6217 | 77.7 | 83 | 133 |
| IL80-1251 | 44 | 6070 | 76.1 | 91 | 135 |
| Bounty-122 | 38 | 6056 | 75.1 | 91 | 135 |
| TX81V6582-2 | 10 | 5938 | 79.3 | 77 | 132 |
| WH180001 | 39 | 5938 | 75.8 | 93 | 135 |
| NA-W83-256 | 41 | 5909 | 75.1 | 92 | 139 |
| AGC-112 | 32 | 5821 | 75.1 | 89 | 136 |
| NE82656 | 29 | 5806 | 72.9 | 98 | 137 |
| NE82533 | 26 | 5718 | 78.4 | 100 | 136 |
| TXGH13622 | 13 | 5630 | 74.8 | 89 | 137 |
| XW161 | 35 | 5630 | 74.5 | 69 | 132 |
| NA-W81-162-W | 42 | 5586 | 76.8 | 84 | 135 |
| NE84557 | 27 | 5440 | 77.1 | 100 | 136 |
| TX87HA1 | 45 | 5381 | 73.5 | 95 | 135 |
| CI1442 | 1 | 5322 | 76.4 | 126 | 143 |
| OK84287 | 6 | 5249 | 76.8 | 90 | 138 |
| IL83-7439 | 43 | 5220 | 75.5 | 98 | 135 |
| TX86V1109 | 18 | 5191 | 74.5 | 93 | 135 |
| TX86V1110 | 19 | 5147 | 75.5 | 90 | 134 |
| KS82C2338 | 25 | 5147 | 79 | 90 | 133 |
| OK84286 | 5 | 5117 | 76.4 | 92 | 138 |
| OK86215 | 8 | 5117 | 74.8 | 89 | 134 |
| OK84343 | 4 | 5088 | 74.2 | 84 | 132 |
| NE83407 | 28 | 5073 | 72.6 | 86 | 137 |
| TX84V1736 | 16 | 5059 | 77.1 | 77 | 133 |
| RL845472 | 31 | 5015 | 76.4 | 92 | 138 |
| TXGH10989 | 9 | 5000 | 75.1 | 81 | 133 |
| C0830014 | 23 | 4795 | 75.1 | 110 | 136 |
| OK86197 | 7 | 4560 | 73.9 | 87 | 133 |
| CI13996 | 2 | 4311 | 75.8 | 105 | 133 |
| KS84HW196 | 24 | 3739 | 71.3 | 84 | 132 |
| MEAN | | 5781 | | | |
| LSD(.05) | | 1255 | | | |
| C.V. | | 15.5 | | | |

BUSHLAND (IRR.)

TEXAS

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD KG/HA | : VOLUME KG/HL | : PLANT HEIGHT CM | : DAYS TO HEADING FROM 1/1: | : LODGING % | : YELLOW INDEX 0-9 |
|---------------------|--------------------|---------------------|----------------------|----------------------------|--------------------------------------|-------------------|-----------------------------|
| TX81V6607-2 | 15 | 6226 | 74.2 | 82 | 130 | 27 | 1 |
| TX81V6582-2 | 10 | 5984 | 73.5 | 85 | 128 | 30 | 1 |
| TX84V1336 | 12 | 5661 | 71.2 | 87 | 130 | 27 | 2 |
| TXGH10563B | 11 | 5502 | 68.1 | 89 | 129 | 35 | 1 |
| XW161 | 35 | 5360 | 70.1 | 85 | 127 | 0 | 3 |
| TX87HA1 | 45 | 5273 | 69.9 | 88 | 132 | 10 | 3 |
| TX84V1736 | 16 | 5183 | 71.1 | 83 | 128 | 37 | 3 |
| AGC-112 | 32 | 5142 | 66.3 | 82 | 130 | 38 | 1 |
| TX84V1317 | 14 | 5107 | 71.2 | 82 | 130 | 18 | 3 |
| TXGH13622 | 13 | 5102 | 69.6 | 90 | 132 | 57 | 2 |
| OK84343 | 4 | 4974 | 72.1 | 88 | 133 | 2 | 2 |
| XH675 | 36 | 4922 | 69.6 | 92 | 133 | 13 | 1 |
| OK84286 | 5 | 4887 | 69.7 | 89 | 133 | 18 | 3 |
| OK86215 | 8 | 4878 | 70.8 | 87 | 131 | 22 | 3 |
| NA-W84-229 | 40 | 4781 | 69.6 | 86 | 133 | 0 | 3 |
| C0830027 | 21 | 4779 | 73.7 | 92 | 131 | 40 | 2 |
| TXGH10989 | 9 | 4757 | 70.1 | 88 | 130 | 55 | 1 |
| OK84287 | 6 | 4711 | 69.2 | 90 | 133 | 13 | 3 |
| KS82C2338 | 25 | 4694 | 70.7 | 88 | 131 | 12 | 3 |
| XH685 | 37 | 4649 | 68.5 | 87 | 133 | 13 | 2 |
| Bounty-122 | 38 | 4642 | 65 | 91 | 133 | 8 | 2 |
| NA-W81-162-W | 42 | 4487 | 68.7 | 81 | 133 | 7 | 3 |
| WH180001 | 39 | 4407 | 68.5 | 94 | 134 | 15 | 4 |
| IL80-1251 | 44 | 4400 | 68.5 | 89 | 135 | 10 | 4 |
| KS84HW196 | 24 | 4389 | 72 | 82 | 129 | 53 | 4 |
| XW141 | 34 | 4344 | 65.6 | 82 | 133 | 5 | 1 |
| OK86197 | 7 | 4341 | 70.7 | 90 | 131 | 62 | 2 |
| RL845472 | 31 | 4297 | 71.6 | 86 | 134 | 23 | 2 |
| NA-W83-256 | 41 | 4220 | 68.3 | 87 | 135 | 33 | 3 |
| TX86A7041 | 17 | 4142 | 64.5 | 74 | 134 | 20 | 4 |
| CI17826 | 3 | 4097 | 65.6 | 88 | 132 | 20 | 2 |
| TX86V1109 | 18 | 4072 | 70.3 | 88 | 132 | 50 | 2 |
| TX86V1110 | 19 | 4048 | 69.2 | 90 | 132 | 42 | 2 |
| NE82656 | 29 | 4036 | 66.8 | 90 | 136 | 15 | 2 |
| NE83407 | 28 | 4014 | 64.1 | 85 | 135 | 10 | 2 |
| RL844677 | 30 | 4009 | 69.2 | 93 | 135 | 13 | 3 |
| C0830034 | 22 | 3902 | 67.6 | 92 | 135 | 17 | 2 |
| IL83-7439 | 43 | 3823 | 69 | 91 | 135 | 35 | 3 |
| NE84557 | 27 | 3249 | 71.2 | 91 | 137 | 38 | 5 |
| C0830014 | 23 | 3210 | 70.5 | 94 | 134 | 17 | 4 |
| C082009 | 20 | 3152 | 68.9 | 88 | 135 | 45 | 3 |
| NE82533 | 26 | 3045 | 69.4 | 91 | 136 | 5 | 3 |
| AGC-113 | 33 | 2966 | 61.8 | 89 | 136 | 30 | 2 |
| CI13996 | 2 | 2870 | 70.8 | 92 | 134 | 73 | 4 |
| CI1442 | 1 | 1734 | 68 | 95 | 142 | 68 | 3 |

MEAN 4410
LSD(.05) 500
C.V. 6.9

BUSHLAND (DRYL.)

TEXAS

FOUR REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : KG/HA : | : VOLUME : WEIGHT : KG/HL : | : PLANT : HEIGHT : CM : | : DAYS TO : HEADING : : FROM 1/1 : | : YELLOW : INDEX : : 0-9 : |
|---------------------|------------------------|----------------------|-----------------------------------|-------------------------------|--|----------------------------------|
| TX81V6607-2 | 15 | 3685 | 82.6 | 62 | 128 | 2 |
| TX81V6582-2 | 10 | 3373 | 81.1 | 61 | 127 | 2 |
| TXGH13622 | 13 | 3160 | 79.2 | 62 | 129 | 2 |
| TX84V1336 | 12 | 3157 | 79.6 | 62 | 128 | 3 |
| TXGH10563B | 11 | 3039 | 78.1 | 65 | 127 | 2 |
| AGC-112 | 32 | 3014 | 79.1 | 64 | 127 | 2 |
| TX84V1317 | 14 | 2977 | 80.2 | 63 | 127 | 4 |
| TXGH10989 | 9 | 2861 | 79.1 | 64 | 128 | 1 |
| C0830034 | 22 | 2857 | 78.7 | 70 | 132 | 4 |
| C0830027 | 21 | 2839 | 80.4 | 75 | 130 | 2 |
| CI17826 | 3 | 2835 | 78.7 | 66 | 129 | 2 |
| OK84286 | 5 | 2825 | 78.6 | 63 | 130 | 1 |
| TX87HA1 | 45 | 2825 | 77.8 | 63 | 128 | 2 |
| TX84V1736 | 16 | 2740 | 77.8 | 62 | 127 | 2 |
| OK84287 | 6 | 2677 | 78.8 | 63 | 130 | 1 |
| OK86215 | 8 | 2672 | 78.2 | 65 | 128 | 2 |
| XH675 | 36 | 2650 | 76.6 | 71 | 131 | 3 |
| XH685 | 37 | 2637 | 76.5 | 68 | 131 | 3 |
| RL845472 | 31 | 2570 | 79.9 | 67 | 131 | 3 |
| OK86197 | 7 | 2460 | 77.5 | 64 | 127 | 3 |
| RL844677 | 30 | 2449 | 78.8 | 68 | 133 | 4 |
| AGC-113 | 33 | 2435 | 75.7 | 66 | 133 | 3 |
| NE84557 | 27 | 2402 | 79 | 67 | 134 | 5 |
| NA-W83-256 | 41 | 2369 | 77.8 | 63 | 131 | 2 |
| KS82C2338 | 25 | 2361 | 79.9 | 65 | 128 | 3 |
| IL80-1251 | 44 | 2349 | 77.2 | 64 | 133 | 4 |
| NA-W81-162-W | 42 | 2329 | 78.1 | 61 | 130 | 3 |
| TX86V1110 | 19 | 2326 | 76.1 | 71 | 128 | 4 |
| KS84HW196 | 24 | 2321 | 79 | 65 | 127 | 4 |
| TX86A7041 | 17 | 2319 | 76.1 | 57 | 133 | 4 |
| OK84343 | 4 | 2260 | 76.8 | 62 | 130 | 3 |
| C082009 | 20 | 2114 | 79.1 | 67 | 134 | 4 |
| TX86V1109 | 18 | 2063 | 76.6 | 60 | 129 | 4 |
| NE83407 | 28 | 2043 | 73.8 | 57 | 134 | 4 |
| WH180001 | 39 | 2031 | 77.2 | 63 | 131 | 3 |
| CI13996 | 2 | 1987 | 79 | 75 | 132 | 5 |
| Bounty-122 | 38 | 1972 | 76.8 | 64 | 132 | 4 |
| XW161 | 35 | 1950 | 77.4 | 56 | 127 | 4 |
| C0830014 | 23 | 1949 | 78.6 | 71 | 131 | 6 |
| NA-W84-229 | 40 | 1927 | 76.9 | 52 | 132 | 5 |
| XW141 | 34 | 1875 | 76.2 | 51 | 132 | 3 |
| NE82533 | 26 | 1841 | 76.9 | 66 | 134 | 4 |
| NE82656 | 29 | 1589 | 75.6 | 64 | 134 | 4 |
| IL83-7439 | 43 | 1541 | 76.5 | 58 | 132 | 6 |
| CI1442 | 1 | 1017 | 72.3 | 66 | 138 | 5 |
| MEAN | | 2437 | | | | |
| LSD(.05) | | 475 | | | | |
| C.V. | | 13.9 | | | | |

CHILLICOTHE

TEXAS

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1: |
|---------------------|------------------------|------------------------|---------------------------------------|-----------------------------------|---|
| TX81V6607-2 | 15 | 4741 | 84.2 | 70 | 109 |
| RL844677 | 30 | 4730 | 81.1 | 82 | 112 |
| XW161 | 35 | 4723 | 82.8 | 70 | 106 |
| C0830027 | 21 | 4656 | 82.5 | 86 | 111 |
| TXGH13622 | 13 | 4580 | 82.8 | 79 | 110 |
| TX87HA1 | 45 | 4557 | 80.8 | 81 | 109 |
| NA-W81-162-W | 42 | 4542 | 81.3 | 74 | 111 |
| C0830014 | 23 | 4506 | 81.7 | 89 | 110 |
| TXGH10563B | 11 | 4492 | 80.2 | 71 | 107 |
| TX86V1110 | 19 | 4398 | 80.4 | 88 | 110 |
| TX84V1317 | 14 | 4389 | 81.2 | 73 | 110 |
| NE83407 | 28 | 4317 | 76 | 78 | 116 |
| TX81V6582-2 | 10 | 4311 | 82.9 | 70 | 106 |
| TX84V1336 | 12 | 4311 | 81.5 | 69 | 108 |
| IL80-1251 | 44 | 4270 | 78.2 | 82 | 118 |
| NE84557 | 27 | 4235 | 81.9 | 93 | 119 |
| XW141 | 34 | 4201 | 80.4 | 76 | 112 |
| NE82656 | 29 | 4176 | 77.9 | 83 | 116 |
| RL845472 | 31 | 4176 | 80.9 | 88 | 115 |
| TX84V1736 | 16 | 4165 | 80.9 | 67 | 106 |
| TX86A7041 | 17 | 4152 | 76.2 | 74 | 112 |
| TXGH10989 | 9 | 4147 | 79.5 | 78 | 111 |
| C0830034 | 22 | 4140 | 80.4 | 92 | 115 |
| TX86V1109 | 18 | 4131 | 80.6 | 92 | 110 |
| Bounty-122 | 38 | 4122 | 79.8 | 73 | 109 |
| WH180001 | 39 | 4122 | 79.7 | 83 | 114 |
| NE82533 | 26 | 4120 | 80.4 | 84 | 117 |
| AGC-113 | 33 | 4096 | 76.6 | 82 | 118 |
| XH675 | 36 | 4084 | 79.7 | 80 | 111 |
| KS82C2338 | 25 | 4075 | 82.8 | 77 | 106 |
| XH685 | 37 | 4069 | 79.7 | 83 | 111 |
| NA-W83-256 | 41 | 4066 | 77.1 | 74 | 112 |
| AGC-112 | 32 | 4060 | 78.5 | 75 | 108 |
| OK86215 | 8 | 4046 | 81.3 | 76 | 106 |
| OK84343 | 4 | 4013 | 79.9 | 75 | 112 |
| NA-W84-229 | 40 | 4001 | 79.9 | 71 | 112 |
| OK84286 | 5 | 3974 | 80.5 | 73 | 110 |
| OK84287 | 6 | 3797 | 80.4 | 76 | 111 |
| CI13996 | 2 | 3762 | 79.1 | 101 | 116 |
| IL83-7439 | 43 | 3757 | 80 | 80 | 116 |
| CI17826 | 3 | 3717 | 75.5 | 77 | 112 |
| OK86197 | 7 | 3670 | 80.7 | 78 | 109 |
| C082009 | 20 | 3654 | 80.7 | 92 | 117 |
| KS84HW196 | 24 | 3237 | 81.5 | 75 | 112 |
| CI1442 | 1 | 2849 | 77.3 | 96 | 127 |
| MEAN | | 4141 | | | |
| LSD(.05) | | 532 | | | |
| C.V. | | 7.9 | | | |

DALLAS, TEXAS -- THREE REPLICATIONS

| C.I. OR SEL. NO. | ENTRY: NO. | YIELD KG/HA | VOLUME KG/HL | PLANT HEIGHT CM | DAYS TO HEADING FROM 1/1 | LEAF RUST SEV. | MILDEW % 0-9 | SEPTORIA % 0-9 | BYD VIRUS 0-5 |
|---------------------|---------------|----------------|-----------------|-----------------------|--------------------------------|----------------------|-----------------|-------------------|---------------------|
| XH675 | 36 | 4222 | 76.7 | 79 | 108 | 5 | 8 | 6 | 1 |
| TX86A7041 | 17 | 4192 | 73.2 | 74 | 110 | 5 | 7 | 6 | 0.5 |
| Bounty-122 | 38 | 4190 | 73.6 | 76 | 104 | 10 | 8 | 7 | 2 |
| NA-W83-256 | 41 | 4094 | 75.4 | 79 | 109 | 15 | 8 | 6 | 1 |
| TX84V1736 | 16 | 4081 | 77.7 | 69 | 101 | 5 | 8 | 6 | 1 |
| XW161 | 35 | 3984 | 76.3 | 64 | 104 | 0 | 8 | 6 | 2 |
| TXGH13622 | 13 | 3973 | 76.1 | 79 | 108 | 30 | 8 | 7 | 1 |
| TX84V1336 | 12 | 3933 | 76.7 | 76 | 109 | 15 | 7 | 7 | 2 |
| XH685 | 37 | 3924 | 75.8 | 81 | 108 | 1 | 7 | 7 | 2 |
| OK86215 | 8 | 3907 | 77.1 | 71 | 103 | 5 | 8 | 7 | 1 |
| OK86197 | 7 | 3905 | 76 | 76 | 108 | 15 | 8 | 6 | 0.5 |
| NA-W81-162-W | 42 | 3791 | 76.8 | 71 | 110 | 1 | 8 | 6 | 2 |
| C0830027 | 21 | 3775 | 77.5 | 84 | 110 | 30 | 8 | 7 | 1 |
| RL844677 | 30 | 3770 | 77.1 | 84 | 109 | 1 | 8 | 6 | 1 |
| TX86V1109 | 18 | 3757 | 75.3 | 86 | 105 | 5 | 8 | 6 | 1.5 |
| OK84286 | 5 | 3714 | 77.1 | 71 | 104 | 1 | 7 | 6 | 1 |
| TX87HA1 | 45 | 3702 | 75.7 | 76 | 106 | 40 | 8 | 6 | 1.5 |
| TXGH10563B | 11 | 3630 | 74.8 | 79 | 107 | 15 | 8 | 6 | 2 |
| TX81V6607-2 | 15 | 3560 | 78.9 | 71 | 110 | 5 | 8 | 6 | 2.5 |
| AGC-113 | 33 | 3494 | 73.3 | 76 | 113 | 10 | 8 | 7 | 3 |
| TX84V1317 | 14 | 3474 | 76.3 | 71 | 109 | 5 | 7 | 7 | 2.5 |
| TXGH10989 | 9 | 3471 | 71.7 | 79 | 113 | 5 | 8 | 5 | 2 |
| C0830014 | 23 | 3465 | 76.1 | 94 | 108 | 35 | 8 | 6 | 2 |
| OK84287 | 6 | 3420 | 78.2 | 71 | 105 | 1 | 7 | 6 | 1 |
| OK84343 | 4 | 3409 | 75.4 | 71 | 118 | 1 | 7 | 6 | 0.5 |
| NE83407 | 28 | 3396 | 73.4 | 71 | 113 | 5 | 8 | 6 | 2.5 |
| AGC-112 | 32 | 3395 | 74.6 | 74 | 108 | 30 | 8 | 7 | 1 |
| NE82656 | 29 | 3354 | 73.7 | 76 | 121 | 0 | 8 | 6 | 3 |
| C0830034 | 22 | 3326 | 75.4 | 89 | 114 | 25 | 8 | 7 | 1 |
| TX86V1110 | 19 | 3303 | 74.2 | 81 | 104 | 5 | 8 | 7 | 2.5 |
| KS82C2338 | 25 | 3298 | 76.6 | 79 | 113 | 25 | 8 | 6 | 2 |
| RL845472 | 31 | 3297 | 76.8 | 81 | 115 | 0 | 8 | 6 | 1 |
| NE82533 | 26 | 3294 | 77.8 | 74 | 120 | 5 | 8 | 6 | 3.5 |
| NE84557 | 27 | 3177 | 76.8 | 89 | 119 | 0 | 8 | 6 | 2 |
| KS84HW196 | 24 | 3171 | 76.7 | 74 | 114 | 15 | 8 | 7 | 2 |
| NA-W84-229 | 40 | 3170 | 75.9 | 69 | 112 | 10 | 8 | 6 | 3.5 |
| IL80-1251 | 44 | 3136 | 75.2 | 79 | 115 | 1 | 8 | 6 | 2 |
| TX81V6582-2 | 10 | 3115 | 80.1 | 69 | 107 | 15 | 8 | 5 | 2 |
| WH180001 | 39 | 3113 | 74.5 | 79 | 121 | 15 | 8 | 5 | 3 |
| IL83-7439 | 43 | 3078 | 74.6 | 79 | 114 | 5 | 8 | 6 | 3 |
| CI13996 | 2 | 2910 | 76.8 | 91 | 120 | 35 | 8 | 6 | 2.5 |
| CI17826 | 3 | 2770 | 73.3 | 71 | 117 | 20 | 8 | 7 | 4 |
| XW141 | 34 | 2699 | 71.3 | 69 | 112 | 10 | 8 | 6 | 2 |
| C082009 | 20 | 2565 | 77 | 81 | 120 | 15 | 8 | 7 | 2 |
| CI1442 | 1 | 1343 | 75.4 | 102 | 127 | 35 | 8 | 6 | 3 |

MEAN 3461
LSD(.05) 442
C.V. 7.8

STILLWATER
OKLAHOMA
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1: | : BYD : : VIRUS : : 0-9 : |
|---------------------|------------------------|------------------------|---------------------------------------|-----------------------------------|---|---------------------------------|
| TX81V6607-2 | 15 | 4089 | 78.7 | 81 | 119 | 4 |
| OK84343 | 4 | 4083 | 79.5 | 85 | 124 | 4 |
| TX84V1317 | 14 | 4001 | 79.1 | 81 | 121 | 7 |
| OK84287 | 6 | 3976 | 80 | 89 | 120 | 3 |
| RL844677 | 30 | 3960 | 81.3 | 97 | 122 | 6 |
| TXGH10989 | 9 | 3868 | 76.8 | 87 | 120 | 4 |
| C0830034 | 22 | 3861 | 79.9 | 100 | 123 | 5 |
| OK84286 | 5 | 3843 | 80 | 86 | 120 | 5 |
| XW161 | 35 | 3814 | 79.1 | 78 | 117 | 3 |
| WH180001 | 39 | 3784 | 78 | 98 | 125 | 5 |
| TX84V1736 | 16 | 3780 | 77.4 | 82 | 118 | 6 |
| AGC-113 | 33 | 3768 | 77.1 | 84 | 125 | 5 |
| TX84V1336 | 12 | 3752 | 74.3 | 86 | 118 | 6 |
| XH685 | 37 | 3744 | 77.4 | 94 | 121 | 5 |
| OK86215 | 8 | 3730 | 77.5 | 84 | 118 | 5 |
| XH675 | 36 | 3691 | 77.7 | 97 | 121 | 4 |
| TX86A7041 | 17 | 3608 | 77 | 82 | 125 | 6 |
| TX81V6582-2 | 10 | 3587 | 78.7 | 78 | 117 | 6 |
| IL80-1251 | 44 | 3574 | 78 | 81 | 127 | 6 |
| C0830027 | 21 | 3571 | 80.1 | 96 | 121 | 6 |
| TXGH13622 | 13 | 3540 | 77.1 | 91 | 119 | 4 |
| OK86197 | 7 | 3510 | 76.1 | 93 | 119 | 5 |
| NE83407 | 28 | 3497 | 78.9 | 82 | 124 | 4 |
| TX87HA1 | 45 | 3427 | 76.5 | 90 | 120 | 6 |
| Bounty-122 | 38 | 3423 | 76 | 90 | 120 | 5 |
| NA-W81-162-W | 42 | 3336 | 79.3 | 83 | 122 | 6 |
| KS82C2338 | 25 | 3316 | 78.7 | 88 | 118 | 6 |
| NE84557 | 27 | 3289 | 82 | 94 | 127 | 6 |
| TXGH10563B | 11 | 3258 | 74.2 | 88 | 117 | 6 |
| NE82656 | 29 | 3251 | 78.2 | 79 | 127 | 6 |
| NA-W84-229 | 40 | 3208 | 77.5 | 80 | 123 | 7 |
| KS84HW196 | 24 | 3199 | 78.3 | 82 | 122 | 6 |
| IL83-7439 | 43 | 3124 | 79.5 | 99 | 125 | 5 |
| C082009 | 20 | 3070 | 81.8 | 95 | 127 | 5 |
| TX86V1109 | 18 | 3058 | 76.9 | 99 | 119 | 6 |
| TX86V1110 | 19 | 3036 | 75.7 | 97 | 119 | 7 |
| NA-W83-256 | 41 | 3029 | 79.6 | 85 | 123 | 6 |
| CI17826 | 3 | 2937 | 74.9 | 83 | 123 | 6 |
| AGC-112 | 32 | 2787 | 75.2 | 79 | 119 | 6 |
| CI13996 | 2 | 2692 | 79.3 | 103 | 127 | 7 |
| RL845472 | 31 | 2651 | 79.3 | 87 | 126 | 7 |
| C0830014 | 23 | 2475 | 78.2 | 98 | 121 | 8 |
| NE82533 | 26 | 2231 | 78.8 | 83 | 129 | 7 |
| CI1442 | 1 | 1779 | 79.1 | 96 | 135 | 7 |
| XW141 | 34 | 1766 | 76.4 | 70 | 124 | 8 |
| MEAN | | 3355 | | | | |
| LSD(.05) | | 359 | | | | |
| C.V. | | 6.5 | | | | |

LAHOMA

OKLAHOMA

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD : KG/HA | : VOLUME : WEIGHT : KG/HL | : PLANT : HEIGHT : CM | : LODGING : % | : |
|---------------------|--------------------|--------------------|---------------------------------|-----------------------------|------------------|---|
| XW161 | 35 | 5482 | 78 | 93 | 0 | |
| OK84343 | 4 | 5351 | 77.8 | 92 | 0 | |
| TX84V1336 | 12 | 5217 | 77.3 | 91 | 3 | |
| TX81V6607-2 | 15 | 5115 | 81 | 91 | 5 | |
| TX84V1317 | 14 | 5064 | 78.9 | 88 | 20 | |
| OK86215 | 8 | 4987 | 77.5 | 94 | 0 | |
| TX84V1736 | 16 | 4946 | 78.4 | 88 | 23 | |
| XH685 | 37 | 4899 | 75.7 | 105 | 0 | |
| NA-W84-229 | 40 | 4847 | 75.3 | 92 | 0 | |
| TX86A7041 | 17 | 4813 | 73.8 | 92 | 0 | |
| RL844677 | 30 | 4763 | 77 | 104 | 0 | |
| TX81V6582-2 | 10 | 4760 | 78.8 | 85 | 2 | |
| OK84286 | 5 | 4743 | 79.5 | 98 | 0 | |
| TX86V1110 | 19 | 4740 | 76.9 | 106 | 27 | |
| NA-W81-162-W | 42 | 4729 | 77.7 | 91 | 0 | |
| OK84287 | 6 | 4704 | 79.1 | 98 | 0 | |
| KS82C2338 | 25 | 4659 | 79.2 | 95 | 0 | |
| WH180001 | 39 | 4578 | 74.3 | 102 | 0 | |
| C0830027 | 21 | 4526 | 79.5 | 103 | 25 | |
| TXGH10989 | 9 | 4478 | 76.5 | 93 | 32 | |
| TX86V1109 | 18 | 4388 | 77.4 | 104 | 27 | |
| IL80-1251 | 44 | 4374 | 72.9 | 95 | 0 | |
| XH675 | 36 | 4363 | 75.6 | 104 | 0 | |
| AGC-112 | 32 | 4324 | 75.1 | 91 | 0 | |
| NE82656 | 29 | 4318 | 74.4 | 94 | 0 | |
| RL845472 | 31 | 4286 | 77.8 | 101 | 0 | |
| TXGH10563B | 11 | 4218 | 75.9 | 99 | 0 | |
| NE83407 | 28 | 4195 | 75.6 | 98 | 0 | |
| Bounty-122 | 38 | 4186 | 74 | 94 | 0 | |
| TX87HA1 | 45 | 4177 | 76.2 | 103 | 0 | |
| XW141 | 34 | 4166 | 72 | 89 | 0 | |
| NA-W83-256 | 41 | 4143 | 74.3 | 101 | 2 | |
| C0830014 | 23 | 4080 | 78.7 | 117 | 0 | |
| OK86197 | 7 | 4064 | 76.5 | 103 | 15 | |
| TXGH13622 | 13 | 3961 | 76.9 | 95 | 5 | |
| KS84HW196 | 24 | 3956 | 78.9 | 97 | 10 | |
| NE84557 | 27 | 3927 | 80.5 | 104 | 2 | |
| CI17826 | 3 | 3816 | 75.1 | 99 | 0 | |
| C0830034 | 22 | 3784 | 77.1 | 106 | 10 | |
| IL83-7439 | 43 | 3617 | 78.2 | 115 | 13 | |
| C082009 | 20 | 3560 | 78.3 | 109 | 5 | |
| AGC-113 | 33 | 3474 | 71.9 | 95 | 25 | |
| CI13996 | 2 | 3458 | 78.7 | 110 | 10 | |
| NE82533 | 26 | 3314 | 76.2 | 94 | 0 | |
| CI1442 | 1 | 1770 | 76.8 | 106 | 27 | |
| MEAN | | 4340 | | | | |
| LSD(.05) | | 364 | | | | |
| C.V. | | 5.1 | | | | |

ALTUS
OKLAHOMA
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : |
|---------------------|------------------------|------------------------|---------------------------------------|-----------------------------------|
| OK84343 | 4 | 4086 | 79.9 | 83 |
| XW161 | 35 | 4049 | 79.3 | 74 |
| WH180001 | 39 | 3564 | 75.1 | 97 |
| XH685 | 37 | 3547 | 75.1 | 99 |
| NA-W81-162-W | 42 | 3536 | 75.9 | 77 |
| TX86V1110 | 19 | 3508 | 75.7 | 91 |
| TX84V1336 | 12 | 3501 | 79.3 | 75 |
| XW141 | 34 | 3501 | 74 | 81 |
| TX86V1109 | 18 | 3497 | 76.4 | 94 |
| TX84V1317 | 14 | 3488 | 80.9 | 74 |
| NE83407 | 28 | 3444 | 74 | 83 |
| TX86A7041 | 17 | 3432 | 73.1 | 85 |
| NE82656 | 29 | 3415 | 74.6 | 89 |
| RL844677 | 30 | 3378 | 74.8 | 99 |
| XH675 | 36 | 3371 | 75.7 | 97 |
| OK84287 | 6 | 3363 | 80.5 | 83 |
| OK84286 | 5 | 3326 | 80.5 | 82 |
| NA-W83-256 | 41 | 3296 | 73.9 | 87 |
| Bounty-122 | 38 | 3290 | 74.8 | 86 |
| NA-W84-229 | 40 | 3289 | 78.3 | 85 |
| AGC-112 | 32 | 3277 | 73.8 | 84 |
| TX87HA1 | 45 | 3270 | 75.6 | 86 |
| TXGH10989 | 9 | 3266 | 76.9 | 84 |
| TX84V1736 | 16 | 3259 | 79.2 | 79 |
| RL845472 | 31 | 3235 | 78.3 | 94 |
| IL83-7439 | 43 | 3222 | 77.9 | 96 |
| IL80-1251 | 44 | 3189 | 76.1 | 90 |
| TX81V6582-2 | 10 | 3160 | 80.2 | 76 |
| TX81V6607-2 | 15 | 3158 | 82.8 | 75 |
| OK86197 | 7 | 3143 | 78.4 | 84 |
| TXGH10563B | 11 | 3137 | 75.6 | 78 |
| KS82C2338 | 25 | 3106 | 79.5 | 86 |
| OK86215 | 8 | 3100 | 78.7 | 83 |
| AGC-113 | 33 | 3096 | 73.3 | 90 |
| KS84HW196 | 24 | 3081 | 79.2 | 82 |
| NE84557 | 27 | 3020 | 77.1 | 97 |
| TXGH13622 | 13 | 3019 | 78.6 | 80 |
| C0830014 | 23 | 2973 | 78.2 | 99 |
| CI17826 | 3 | 2897 | 75.3 | 84 |
| CI13996 | 2 | 2842 | 77.9 | 105 |
| C0830034 | 22 | 2820 | 76.6 | 96 |
| C0830027 | 21 | 2798 | 79.6 | 93 |
| NE82533 | 26 | 2554 | 77.8 | 91 |
| C082009 | 20 | 2472 | 76.6 | 99 |
| CI1442 | 1 | 1680 | 78.3 | 98 |

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| MEAN | 3215 |
| LSD(.05) | 375 |
| C.V. | 7.1 |

GOODWELL

OKLAHOMA

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1: |
|---------------------|------------------------|------------------------|---------------------------------------|-----------------------------------|---|
| OK84286 | 5 | 5098 | 75.3 | 102 | 133 |
| XW161 | 35 | 4805 | 74.6 | 86 | 132 |
| OK86215 | 8 | 4785 | 74.2 | 97 | 133 |
| OK84287 | 6 | 4708 | 74.2 | 102 | 134 |
| XW141 | 34 | 4699 | 70.4 | 89 | 134 |
| OK84343 | 4 | 4664 | 73.9 | 98 | 135 |
| TX81V6582-2 | 10 | 4657 | 76.2 | 89 | 132 |
| TX84V1317 | 14 | 4441 | 73.9 | 91 | 133 |
| TXGH10563B | 11 | 4413 | 71.1 | 102 | 132 |
| TX84V1736 | 16 | 4403 | 73 | 91 | 133 |
| RL845472 | 31 | 4362 | 74.4 | 109 | 136 |
| NA-W83-256 | 41 | 4354 | 69 | 99 | 136 |
| TX84V1336 | 12 | 4346 | 72.4 | 99 | 133 |
| XH675 | 36 | 4292 | 71.2 | 108 | 133 |
| NA-W81-162-W | 42 | 4263 | 72 | 93 | 135 |
| AGC-112 | 32 | 4207 | 69.5 | 99 | 133 |
| TX81V6607-2 | 15 | 4176 | 75.5 | 92 | 133 |
| IL80-1251 | 44 | 4176 | 68.5 | 104 | 136 |
| TX87HA1 | 45 | 4135 | 70.8 | 104 | 133 |
| TX86A7041 | 17 | 4134 | 67.7 | 95 | 136 |
| OK86197 | 7 | 4122 | 73.8 | 104 | 133 |
| NE82656 | 29 | 4113 | 69.8 | 107 | 137 |
| XH685 | 37 | 4092 | 72 | 109 | 133 |
| KS82C2338 | 25 | 4091 | 74.8 | 100 | 133 |
| TXGH10989 | 9 | 4020 | 71 | 97 | 134 |
| WH180001 | 39 | 4013 | 68.8 | 107 | 135 |
| NE83407 | 28 | 3953 | 67.9 | 101 | 137 |
| TX86V1110 | 19 | 3952 | 71.1 | 99 | 133 |
| NA-W84-229 | 40 | 3922 | 69.9 | 101 | 135 |
| RL844677 | 30 | 3913 | 72.1 | 110 | 136 |
| NE84557 | 27 | 3887 | 74.7 | 106 | 138 |
| TX86V1109 | 18 | 3873 | 73 | 101 | 133 |
| Bounty-122 | 38 | 3864 | 68 | 103 | 135 |
| AGC-113 | 33 | 3808 | 66.6 | 106 | 137 |
| KS84HW196 | 24 | 3802 | 75.6 | 100 | 133 |
| C0830027 | 21 | 3790 | 73.1 | 108 | 133 |
| IL83-7439 | 43 | 3697 | 73.8 | 107 | 135 |
| TXGH13622 | 13 | 3684 | 72.4 | 99 | 133 |
| NE82533 | 26 | 3593 | 72.1 | 107 | 138 |
| CI13996 | 2 | 3575 | 75.6 | 104 | 136 |
| C0830014 | 23 | 3553 | 73.8 | 114 | 135 |
| C082009 | 20 | 3504 | 72.8 | 104 | 137 |
| CI17826 | 3 | 3436 | 69.3 | 102 | 133 |
| C0830034 | 22 | 3392 | 70.6 | 107 | 137 |
| CI1442 | 1 | 2592 | 71.7 | 115 | 140 |

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| MEAN | 4075 |
| LSD(.05) | 555 |
| C.V. | 8.3 |

HUTCHINSON
KANSAS
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD : KG/HA | : VOLUME : WEIGHT : KG/HL | : PLANT : HEIGHT : CM | : DAYS TO : HEADING : FROM 1/1: |
|---------------------|--------------------|--------------------|---------------------------------|-----------------------------|---------------------------------------|
| TX81V6582-2 | 10 | 2979 | 66.7 | 74 | 137 |
| XW161 | 35 | 2511 | 63.3 | 75 | 135 |
| TX81V6607-2 | 15 | 2499 | 68.2 | 75 | 136 |
| AGC-112 | 32 | 2273 | 61.9 | 80 | 136 |
| TX87HA1 | 45 | 2247 | 61.8 | 84 | 136 |
| OK86215 | 8 | 2130 | 63.1 | 78 | 133 |
| TXGH10563B | 11 | 2106 | 60 | 80 | 135 |
| OK86197 | 7 | 2082 | 63.6 | 75 | 133 |
| KS82C2338 | 25 | 2011 | 67.1 | 75 | 135 |
| TXGH10989 | 9 | 2003 | 59.7 | 76 | 135 |
| TXGH13622 | 13 | 1945 | 62.8 | 78 | 136 |
| TX86V1109 | 18 | 1929 | 61.3 | 81 | 135 |
| TX84V1736 | 16 | 1820 | 60.4 | 70 | 135 |
| XH675 | 36 | 1804 | 59 | 79 | 137 |
| OK84343 | 4 | 1802 | 62.7 | 77 | 131 |
| OK84286 | 5 | 1727 | 59.1 | 75 | 132 |
| NE82656 | 29 | 1678 | 58.6 | 74 | 135 |
| RL844677 | 30 | 1647 | 59.5 | 79 | 135 |
| TX86V1110 | 19 | 1642 | 58.4 | 78 | 134 |
| TX84V1336 | 12 | 1607 | 62.2 | 75 | 133 |
| XW141 | 34 | 1580 | 53.5 | 72 | 135 |
| KS84HW196 | 24 | 1578 | 63.3 | 72 | 137 |
| IL80-1251 | 44 | 1559 | 53.9 | 75 | 135 |
| C0830027 | 21 | 1545 | 61.9 | 82 | 135 |
| TX84V1317 | 14 | 1508 | 60.2 | 77 | 137 |
| XH685 | 37 | 1496 | 57.4 | 75 | 137 |
| OK84287 | 6 | 1481 | 60.2 | 68 | 133 |
| RL845472 | 31 | 1341 | 61.7 | 73 | 136 |
| NA-W81-162-W | 42 | 1331 | 58.3 | 69 | 135 |
| NA-W83-256 | 41 | 1300 | 58.3 | 68 | 134 |
| Bounty-122 | 38 | 1232 | 53.3 | 71 | 135 |
| C082009 | 20 | 1208 | 59.1 | 79 | 137 |
| WH180001 | 39 | 1186 | 57.9 | 78 | 135 |
| NA-W84-229 | 40 | 1186 | 57.3 | 65 | 136 |
| C0830014 | 23 | 1117 | 61.3 | 78 | 136 |
| NE84557 | 27 | 1058 | 60.4 | 78 | 135 |
| C0830034 | 22 | 1039 | 54.3 | 78 | 135 |
| NE83407 | 28 | 935 | 54.2 | 69 | 136 |
| IL83-7439 | 43 | 925 | 53 | 63 | 137 |
| CI13996 | 2 | 894 | 58.6 | 80 | 134 |
| AGC-113 | 33 | 820 | 51.2 | 71 | 136 |
| CI17826 | 3 | 819 | 53 | 67 | 132 |
| NE82533 | 26 | 704 | 57.5 | 72 | 135 |
| TX86A7041 | 17 | 604 | 53.3 | 62 | 135 |
| CI1442 | 1 | 510 | 58.1 | 84 | 137 |

| | |
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| MEAN | 1542 |
| LSD(.05) | 445 |
| C.V. | 17.7 |

MANHATTAN
KANSAS
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD KG/HA | : VOLUME WEIGHT KG/HL | : PLANT HEIGHT CM | : DAYS TO HEADING FROM 1/1 | : LEAF SEV.: % : 0-9 | : RUST: RESP: |
|---------------------|--------------------|------------------|-----------------------------|-------------------------|----------------------------------|----------------------------|------------------|
| TXGH13622 | 13 | 4675 | 81.8 | 80 | 131 | 70 | 8 |
| RL844677 | 30 | 4651 | 82.2 | 87 | 133 | 15 | 3 |
| XH685 | 37 | 4637 | 78.9 | 82 | 131 | 50 | 8 |
| TX84V1317 | 14 | 4601 | 80.6 | 73 | 131 | 20 | 8 |
| XW161 | 35 | 4505 | 81 | 67 | 129 | 10 | 3 |
| OK86215 | 8 | 4391 | 80.9 | 74 | 130 | 50 | 8 |
| NA-W83-256 | 41 | 4382 | 79.5 | 79 | 131 | 70 | 8 |
| NA-W81-162-W | 42 | 4338 | 82 | 71 | 132 | 30 | 8 |
| XW141 | 34 | 4311 | 78.8 | 72 | 133 | 20 | 3 |
| TX87HA1 | 45 | 4246 | 80.7 | 91 | 130 | 15 | 8 |
| TX84V1336 | 12 | 4236 | 80.2 | 76 | 131 | 30 | 7 |
| NE82656 | 29 | 4223 | 78.4 | 75 | 135 | 15 | 3 |
| AGC-113 | 33 | 4215 | 77.7 | 74 | 134 | 70 | 8 |
| XH675 | 36 | 4202 | 79.6 | 81 | 132 | 50 | 8 |
| IL80-1251 | 44 | 4155 | 80.6 | 74 | 134 | 30 | 8 |
| TX81V6607-2 | 15 | 4123 | 83.5 | 69 | 131 | 15 | 7 |
| TXGH10563B | 11 | 4104 | 78.8 | 78 | 130 | 60 | 8 |
| TX81V6582-2 | 10 | 4043 | 81.7 | 71 | 130 | 50 | 8 |
| WH180001 | 39 | 4002 | 79.4 | 79 | 133 | 30 | 3 |
| TX86A7041 | 17 | 3991 | 78.1 | 68 | 132 | 10 | 3 |
| TX84V1736 | 16 | 3990 | 81.3 | 70 | 129 | 40 | 8 |
| NA-W84-229 | 40 | 3958 | 80 | 73 | 132 | 30 | 7 |
| AGC-112 | 32 | 3936 | 79 | 79 | 130 | 70 | 8 |
| RL845472 | 31 | 3912 | 80.8 | 81 | 132 | 20 | 8 |
| NE83407 | 28 | 3903 | 77.3 | 72 | 133 | 80 | 8 |
| OK86197 | 7 | 3890 | 80.9 | 78 | 131 | 60 | 8 |
| NE84557 | 27 | 3884 | 81.7 | 87 | 134 | 25 | 8 |
| OK84343 | 4 | 3866 | 79.7 | 70 | 133 | 30 | 7 |
| C0830014 | 23 | 3852 | 79.5 | 67 | 131 | 70 | 8 |
| KS84HW196 | 24 | 3844 | 80.8 | 76 | 131 | 70 | 8 |
| NE82533 | 26 | 3840 | 80.8 | 80 | 134 | 70 | 8 |
| TXGH10989 | 9 | 3822 | 78.7 | 63 | 133 | 70 | 8 |
| TX86V1109 | 18 | 3807 | 79.1 | 87 | 132 | 10 | 3 |
| TX86V1110 | 19 | 3777 | 78 | 84 | 131 | 10 | 3 |
| CI17826 | 3 | 3762 | 77.9 | 77 | 132 | 80 | 8 |
| C0830034 | 22 | 3704 | 80.6 | 78 | 135 | 80 | 8 |
| KS82C2338 | 25 | 3692 | 81.4 | 79 | 130 | 80 | 8 |
| IL83-7439 | 43 | 3656 | 80.4 | 85 | 133 | 15 | 8 |
| C0830027 | 21 | 3526 | 81.9 | 77 | 132 | 30 | 3 |
| OK84286 | 5 | 3451 | 81.3 | 67 | 132 | 60 | 8 |
| CI13996 | 2 | 3389 | 80.9 | 90 | 133 | 70 | 8 |
| C082009 | 20 | 3144 | 80.6 | 76 | 135 | 40 | 8 |
| OK84287 | 6 | 3112 | 80.3 | 68 | 132 | 60 | 8 |
| Bounty-122 | 38 | 3006 | 77 | 73 | 132 | 80 | 8 |
| CI1442 | 1 | 2792 | 77.8 | 83 | 139 | 70 | 8 |

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|----------|------|
| MEAN | 3945 |
| LSD(.05) | 566 |
| C.V. | 8.8 |

HAYS
KANSAS
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : KG/HA : | : VOLUME : WEIGHT : KG/HL : | : PLANT : HEIGHT : CM : | : DAYS TO : HEADING : FROM 1/1: |
|---------------------|------------------------|----------------------|-----------------------------------|-------------------------------|---------------------------------------|
| TXGH13622 | 13 | 2712 | 79.5 | 61 | 134 |
| TX81V6582-2 | 10 | 2641 | 82.1 | 55 | 132 |
| TXGH10563B | 11 | 2609 | 78.5 | 57 | 133 |
| TX81V6607-2 | 15 | 2569 | 81.6 | 53 | 135 |
| TXGH10989 | 9 | 2551 | 79.5 | 60 | 134 |
| OK84343 | 4 | 2547 | 78.2 | 59 | 135 |
| C0830034 | 22 | 2517 | 79.3 | 64 | 138 |
| RL844677 | 30 | 2421 | 80.9 | 62 | 136 |
| XW161 | 35 | 2419 | 79.1 | 53 | 131 |
| KS84HW196 | 24 | 2401 | 81 | 61 | 132 |
| TX87HA1 | 45 | 2383 | 79 | 58 | 132 |
| TX84V1336 | 12 | 2349 | 79.6 | 54 | 135 |
| C0830014 | 23 | 2340 | 78 | 63 | 135 |
| NE83407 | 28 | 2336 | 76.2 | 59 | 137 |
| C0830027 | 21 | 2327 | 81.4 | 58 | 136 |
| NA-W83-256 | 41 | 2291 | 76.6 | 58 | 135 |
| XH685 | 37 | 2287 | 78 | 61 | 135 |
| AGC-112 | 32 | 2284 | 77.7 | 56 | 133 |
| TX86V1109 | 18 | 2266 | 76.9 | 64 | 136 |
| TX84V1317 | 14 | 2257 | 80.7 | 55 | 135 |
| CI17826 | 3 | 2235 | 78 | 54 | 134 |
| NA-W84-229 | 40 | 2233 | 77.3 | 54 | 136 |
| IL80-1251 | 44 | 2233 | 78.9 | 59 | 136 |
| OK84286 | 5 | 2215 | 79.1 | 54 | 135 |
| RL845472 | 31 | 2215 | 79.2 | 56 | 136 |
| OK86215 | 8 | 2201 | 79.2 | 57 | 133 |
| Bounty-122 | 38 | 2201 | 76.2 | 57 | 134 |
| KS82C2338 | 25 | 2186 | 81.4 | 59 | 132 |
| XH675 | 36 | 2174 | 77.8 | 59 | 135 |
| WH180001 | 39 | 2154 | 77.5 | 62 | 137 |
| OK84287 | 6 | 2132 | 78.9 | 52 | 136 |
| NE82533 | 26 | 2121 | 76.4 | 57 | 139 |
| NA-W81-162-W | 42 | 2118 | 77.8 | 50 | 135 |
| IL83-7439 | 43 | 2107 | 77.5 | 59 | 135 |
| AGC-113 | 33 | 2083 | 77.4 | 55 | 139 |
| TX86V1110 | 19 | 2076 | 74.8 | 62 | 135 |
| TX84V1736 | 16 | 2067 | 80.2 | 49 | 134 |
| CI13996 | 2 | 2047 | 78 | 66 | 136 |
| NE82656 | 29 | 2042 | 76.2 | 56 | 138 |
| NE84557 | 27 | 2038 | 77.7 | 59 | 138 |
| XW141 | 34 | 2022 | 72.8 | 51 | 139 |
| OK86197 | 7 | 2009 | 79.7 | 58 | 132 |
| TX86A7041 | 17 | 1993 | 75 | 54 | 138 |
| C082009 | 20 | 1883 | 76.4 | 57 | 138 |
| KS87H66 | 46 | 1775 | 78.1 | 47 | 135 |
| CI1442 | 1 | 1397 | 74.2 | 71 | 142 |
| MEAN | | 2227 | | | |
| LSD(.05) | | 427 | | | |
| C.V. | | 11.7 | | | |

GARDEN CITY
KANSAS
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1: |
|---------------------|------------------------|------------------------|---------------------------------------|-----------------------------------|---|
| TXGH13622 | 13 | 3244 | 78.9 | 62 | 137 |
| XH675 | 36 | 3219 | 76.2 | 62 | 137 |
| AGC-112 | 32 | 3199 | 77 | 60 | 137 |
| TXGH10563B | 11 | 3167 | 76.1 | 58 | 136 |
| TX81V6607-2 | 15 | 3158 | 81.2 | 57 | 138 |
| TX87HA1 | 45 | 3042 | 77.7 | 63 | 137 |
| TXGH10989 | 9 | 2982 | 77.5 | 60 | 138 |
| KS82C2338 | 25 | 2977 | 78.1 | 60 | 138 |
| TX84V1317 | 14 | 2874 | 78.4 | 58 | 137 |
| C0830034 | 22 | 2860 | 77.8 | 58 | 140 |
| C0830027 | 21 | 2840 | 78.6 | 65 | 137 |
| OK84286 | 5 | 2831 | 77.6 | 62 | 137 |
| C082009 | 20 | 2825 | 78.4 | 60 | 141 |
| TX86V1109 | 18 | 2820 | 75.9 | 65 | 138 |
| TX81V6582-2 | 10 | 2813 | 80.2 | 58 | 137 |
| NA-W83-256 | 41 | 2802 | 75.6 | 60 | 138 |
| RL844677 | 30 | 2795 | 77 | 60 | 139 |
| AGC-113 | 33 | 2766 | 73.9 | 55 | 140 |
| XH685 | 37 | 2739 | 76.5 | 58 | 138 |
| NE82533 | 26 | 2733 | 75.9 | 60 | 139 |
| OK84287 | 6 | 2706 | 78.2 | 60 | 137 |
| OK86215 | 8 | 2684 | 77.6 | 62 | 137 |
| RL845472 | 31 | 2677 | 77.9 | 58 | 138 |
| OK86197 | 7 | 2659 | 77.2 | 60 | 137 |
| TX86V1110 | 19 | 2641 | 74.9 | 62 | 138 |
| NE82656 | 29 | 2639 | 74.3 | 57 | 139 |
| CI17826 | 3 | 2621 | 76.6 | 57 | 137 |
| TX84V1736 | 16 | 2596 | 76.6 | 57 | 136 |
| NE83407 | 28 | 2556 | 73.4 | 55 | 140 |
| CI13996 | 2 | 2554 | 78.2 | 68 | 138 |
| IL80-1251 | 44 | 2533 | 77 | 57 | 139 |
| KS84HW196 | 24 | 2529 | 77.9 | 62 | 137 |
| XW141 | 34 | 2498 | 75 | 53 | 138 |
| C0830014 | 23 | 2477 | 78.6 | 68 | 137 |
| NE84557 | 27 | 2455 | 77.1 | 60 | 140 |
| IL83-7439 | 43 | 2453 | 75.4 | 52 | 141 |
| XW161 | 35 | 2399 | 75.7 | 53 | 137 |
| NA-W81-162-W | 42 | 2397 | 77.2 | 53 | 140 |
| Bounty-122 | 38 | 2392 | 75.1 | 60 | 138 |
| OK84343 | 4 | 2385 | 76.7 | 57 | 140 |
| NA-W84-229 | 40 | 2368 | 75.9 | 53 | 140 |
| TX84V1336 | 12 | 2345 | 77.4 | 55 | 137 |
| WH180001 | 39 | 2280 | 76.1 | 62 | 138 |
| TX86A7041 | 17 | 2260 | 71.8 | 55 | 139 |
| CI1442 | 1 | 1924 | 75 | 70 | 144 |

| | |
|----------|------|
| MEAN | 2683 |
| LSD(.05) | 377 |
| C.V. | 8.6 |

AKRON

COLORADO

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : |
|---------------------|------------------------|------------------------|---------------------------------------|
| TXGH13622 | 13 | 1835 | 65.3 |
| AGC-112 | 32 | 1822 | 69.6 |
| OK84343 | 4 | 1782 | 70.3 |
| NE82656 | 29 | 1750 | 66.5 |
| TXGH10563B | 11 | 1699 | 64.4 |
| TXGH10989 | 9 | 1649 | 66.2 |
| RL845472 | 31 | 1643 | 67.8 |
| CI17826 | 3 | 1582 | 63.1 |
| NE84557 | 27 | 1568 | 72.7 |
| TX87HA1 | 45 | 1547 | 65.3 |
| RL844677 | 30 | 1534 | 65 |
| TX81V6607-2 | 15 | 1508 | 68.4 |
| AGC-113 | 33 | 1493 | 63.7 |
| NE82533 | 26 | 1458 | 65.9 |
| TX84V1736 | 16 | 1447 | 64.7 |
| IL83-7439 | 43 | 1434 | 71.2 |
| TX84V1336 | 12 | 1423 | 63.4 |
| OK84286 | 5 | 1416 | 68.1 |
| KS84HW196 | 24 | 1407 | 69.9 |
| KS82C2338 | 25 | 1400 | 65.6 |
| NE83407 | 28 | 1393 | 59.1 |
| XH675 | 36 | 1378 | 64.7 |
| TX84V1317 | 14 | 1325 | 67.8 |
| OK86215 | 8 | 1315 | 66.2 |
| XW161 | 35 | 1266 | 63.1 |
| Bounty-122 | 38 | 1233 | 60 |
| WH180001 | 39 | 1228 | 64.1 |
| NA-W81-162-W | 42 | 1221 | 63.4 |
| OK86197 | 7 | 1217 | 68.4 |
| C0830027 | 21 | 1205 | 69.9 |
| CI13996 | 2 | 1203 | 69.3 |
| NA-W83-256 | 41 | 1198 | 64.4 |
| TX81V6582-2 | 10 | 1194 | 65.6 |
| OK84287 | 6 | 1193 | 69 |
| IL80-1251 | 44 | 1192 | 65.6 |
| C082009 | 20 | 1179 | 68.4 |
| XW141 | 34 | 1141 | 58.2 |
| C0830034 | 22 | 1124 | 65.6 |
| NA-W84-229 | 40 | 1122 | 69.3 |
| XH685 | 37 | 1113 | 59.1 |
| TX86A7041 | 17 | 1085 | 59.1 |
| TX86V1110 | 19 | 1044 | 66.5 |
| TX86V1109 | 18 | 987 | . |
| CI1442 | 1 | 832 | 71.5 |
| C0830014 | 23 | 791 | 69.3 |
| MEAN | | 1346 | |
| LSD(.05) | | 459 | |
| C.V. | | 20.9 | |

BURLINGTON
COLORADO
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD : KG/HA | : VOLUME : WEIGHT : KG/HL | : PLANT : HEIGHT : CM |
|---------------------|--------------------|--------------------|---------------------------------|-----------------------------|
| AGC-112 | 32 | 3175 | 71.2 | 84 |
| TX84V1336 | 12 | 3122 | 72.4 | 79 |
| KS84HW196 | 24 | 3025 | 74.3 | 81 |
| RL845472 | 31 | 2968 | 76.1 | 89 |
| KS82C2338 | 25 | 2964 | 73.3 | 79 |
| OK86215 | 8 | 2932 | 71.5 | 79 |
| OK84343 | 4 | 2873 | 72.4 | 79 |
| TX87HA1 | 45 | 2851 | 72.4 | 89 |
| OK84287 | 6 | 2841 | 72.4 | 84 |
| NE82656 | 29 | 2820 | 68.1 | 91 |
| XH685 | 37 | 2819 | 71.8 | 94 |
| TXGH10563B | 11 | 2817 | 70.3 | 84 |
| C0830027 | 21 | 2786 | 74 | 91 |
| TX81V6582-2 | 10 | 2784 | 73 | 79 |
| OK84286 | 5 | 2764 | 74 | 84 |
| RL844677 | 30 | 2748 | 71.2 | 99 |
| TXGH13622 | 13 | 2715 | 71.5 | 86 |
| IL80-1251 | 44 | 2698 | 72.4 | 84 |
| TX84V1317 | 14 | 2693 | 73.7 | 76 |
| NE82533 | 26 | 2686 | 70.9 | 81 |
| TX81V6607-2 | 15 | 2669 | 75.2 | 79 |
| NA-W84-229 | 40 | 2649 | 74.9 | 81 |
| XW161 | 35 | 2647 | 70.6 | 69 |
| TX86V1110 | 19 | 2635 | 70.6 | 91 |
| CI13996 | 2 | 2630 | 74.3 | 112 |
| TXGH10989 | 9 | 2629 | 69.9 | 84 |
| WH180001 | 39 | 2621 | 72.4 | 84 |
| OK86197 | 7 | 2619 | 71.8 | 81 |
| TX86V1109 | 18 | 2577 | 70.9 | 91 |
| NE84557 | 27 | 2550 | 72.4 | 99 |
| NA-W83-256 | 41 | 2526 | 71.5 | 84 |
| AGC-113 | 33 | 2488 | 68.1 | 94 |
| NE83407 | 28 | 2451 | 68.7 | 81 |
| IL83-7439 | 43 | 2427 | 72.7 | 89 |
| CI17826 | 3 | 2396 | 69.6 | 81 |
| C0830014 | 23 | 2378 | 72.7 | 107 |
| TX86A7041 | 17 | 2371 | 69.9 | 74 |
| NA-W81-162-W | 42 | 2363 | 73 | 69 |
| XH675 | 36 | 2309 | 69.6 | 94 |
| C082009 | 20 | 2230 | 71.8 | 107 |
| C0830034 | 22 | 2001 | 69 | 94 |
| CI1442 | 1 | 1888 | 67.5 | 117 |
| Bounty-122 | 38 | 1873 | 68.1 | 84 |
| XW141 | 34 | 1821 | 67.5 | 76 |
| TX84V1736 | 16 | 1696 | 73 | 76 |
| MEAN | | 2589 | | |
| LSD(.05) | | 585 | | |
| C.V. | | 13.8 | | |

JULESBURG
COLORADO
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD : KG/HA | : VOLUME : WEIGHT : KG/HL | : PLANT : HEIGHT : CM |
|---------------------|--------------------|--------------------|---------------------------------|-----------------------------|
| RL845472 | 31 | 2254 | 69.6 | 81 |
| KS82C2338 | 25 | 2088 | 68.1 | 79 |
| NE82656 | 29 | 2078 | 64.7 | 84 |
| TX87HA1 | 45 | 2016 | 68.1 | 89 |
| NE84557 | 27 | 2006 | 66.5 | 99 |
| WH180001 | 39 | 1980 | 65.9 | 99 |
| AGC-112 | 32 | 1921 | 67.5 | 81 |
| CI13996 | 2 | 1866 | 67.8 | 94 |
| NE82533 | 26 | 1733 | 63.1 | 91 |
| IL80-1251 | 44 | 1732 | 66.2 | 89 |
| CI17826 | 3 | 1679 | 63.1 | 76 |
| OK86197 | 7 | 1649 | 65.3 | 76 |
| NE83407 | 28 | 1577 | 61.6 | 84 |
| TXGH13622 | 13 | 1567 | 61 | 79 |
| RL844677 | 30 | 1550 | 67.8 | 97 |
| TXGH10563B | 11 | 1538 | 63.7 | 84 |
| C0830034 | 22 | 1521 | 62.2 | 91 |
| NA-W81-162-W | 42 | 1491 | 66.8 | 74 |
| XH685 | 37 | 1485 | 62.5 | 89 |
| NA-W83-256 | 41 | 1485 | 64.7 | 91 |
| OK86215 | 8 | 1473 | 62.5 | 74 |
| OK84343 | 4 | 1449 | 65.3 | 79 |
| XH675 | 36 | 1434 | 65.6 | 84 |
| C0830014 | 23 | 1408 | 60 | 81 |
| XW161 | 35 | 1337 | 61.9 | 69 |
| TX81V6607-2 | 15 | 1320 | 68.1 | 71 |
| IL83-7439 | 43 | 1290 | 66.2 | 102 |
| TX86V1109 | 18 | 1280 | 63.1 | 97 |
| C082009 | 20 | 1273 | 68.7 | 89 |
| TX81V6582-2 | 10 | 1260 | 66.2 | 61 |
| TX86V1110 | 19 | 1253 | 64.7 | 91 |
| KS84HW196 | 24 | 1234 | 66.2 | 74 |
| AGC-113 | 33 | 1210 | 59.4 | 89 |
| Bounty-122 | 38 | 1198 | 58.8 | 84 |
| NA-W84-229 | 40 | 1196 | 67.2 | 74 |
| TX84V1736 | 16 | 1139 | 65.9 | 58 |
| OK84286 | 5 | 1081 | 64.4 | 76 |
| TX84V1317 | 14 | 1057 | 65 | 74 |
| TX84V1336 | 12 | 1043 | 64.4 | 69 |
| OK84287 | 6 | 1042 | 62.8 | 71 |
| XW141 | 34 | 990 | 59.4 | 71 |
| TXGH10989 | 9 | 980 | 61 | 64 |
| C0830027 | 21 | 960 | 65.3 | 71 |
| TX86A7041 | 17 | 936 | 55.4 | 71 |
| CI1442 | 1 | 784 | 67.5 | 102 |
| MEAN | | 1441 | | |
| LSD(.05) | | 548 | | |
| C.V. | | 23.3 | | |

LINCOLN
NEBRASKA
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD KG/HA | : VOLUME WEIGHT KG/HL | : PLANT HEIGHT CM | : DAYS TO HEADING FROM 1/1 | : LEAF RUST: SEV.: % | : RESP: 0-9: |
|---------------------|--------------------|------------------|-----------------------------|-------------------------|----------------------------------|----------------------------|-----------------|
| AGC-112 | 32 | 4779 | 78.4 | 78 | 137 | 8 | |
| TXGH13622 | 13 | 4721 | 83.7 | 75 | 136 | 8 | |
| RL844677 | 30 | 4636 | 83.3 | 83 | 138 | 2 | |
| XW161 | 35 | 4600 | 82.9 | 67 | 137 | 2 | |
| TXGH10563B | 11 | 4589 | 79.7 | 75 | 136 | 8 | |
| TX87HA1 | 45 | 4562 | 81.8 | 79 | 138 | 8 | |
| AGC-113 | 33 | 4472 | 81 | 79 | 139 | 8 | |
| TX84V1317 | 14 | 4470 | 82.3 | 70 | 139 | 7 | |
| OK86215 | 8 | 4434 | 80.8 | 79 | 137 | 2 | |
| C0830034 | 22 | 4414 | 81.4 | 85 | 138 | 8 | |
| TX86V1109 | 18 | 4389 | 81.4 | 86 | 137 | 2 | |
| NA-W81-162-W | 42 | 4380 | 82.7 | 70 | 137 | 8 | |
| IL80-1251 | 44 | 4369 | 81.9 | 77 | 139 | 7 | |
| NE84557 | 27 | 4360 | 82.4 | 82 | 139 | 8 | |
| TX81V6582-2 | 10 | 4351 | 82.9 | 66 | 136 | 8 | |
| XH685 | 37 | 4329 | 80.6 | 86 | 138 | 8 | |
| IL83-7439 | 43 | 4320 | 80.9 | 85 | 137 | 7 | |
| CI17826 | 3 | 4295 | 79.2 | 77 | 137 | 8 | |
| OK86197 | 7 | 4232 | 81.4 | 75 | 137 | 8 | |
| TX86A7041 | 17 | 4228 | 79.3 | 75 | 138 | 2 | |
| TX81V6607-2 | 15 | 4178 | 84.2 | 69 | 138 | 5 | |
| XH675 | 36 | 4154 | 80.5 | 86 | 138 | 8 | |
| RL845472 | 31 | 4152 | 80.4 | 84 | 138 | 7 | |
| C0830027 | 21 | 4109 | 84.4 | 81 | 138 | 5 | |
| TX84V1336 | 12 | 4060 | 82.8 | 71 | 138 | 3 | |
| NE83407 | 28 | 4006 | 79.1 | 73 | 139 | 8 | |
| OK84286 | 5 | 3905 | 80.9 | 72 | 137 | 2 | |
| NA-W84-229 | 40 | 3880 | 80.2 | 74 | 137 | 2 | |
| OK84343 | 4 | 3849 | 79.2 | 68 | 139 | 5 | |
| NA-W83-256 | 41 | 3838 | 80 | 75 | 138 | 7 | |
| NE82656 | 29 | 3835 | 77.7 | 80 | 139 | 2 | |
| OK84287 | 6 | 3824 | 80.9 | 70 | 137 | 2 | |
| TXGH10989 | 9 | 3806 | 81.7 | 69 | 138 | 8 | |
| CI13996 | 2 | 3719 | 82 | 91 | 138 | 8 | |
| TX86V1110 | 19 | 3708 | 80.4 | 87 | 136 | 2 | |
| WH180001 | 39 | 3679 | 80.9 | 81 | 137 | 3 | |
| KS82C2338 | 25 | 3672 | 82.6 | 73 | 137 | 5 | |
| KS84HW196 | 24 | 3665 | 81.5 | 73 | 137 | 8 | |
| C0830014 | 23 | 3549 | 78.9 | 82 | 138 | 8 | |
| NE82533 | 26 | 3490 | 81.7 | 80 | 139 | 8 | |
| C082009 | 20 | 3217 | 82.4 | 83 | 140 | 7 | |
| Bounty-122 | 38 | 3212 | 77.9 | 75 | 138 | 8 | |
| TX84V1736 | 16 | 3174 | 83.6 | 71 | 137 | 5 | |
| XW141 | 34 | 3120 | 78.3 | 67 | 137 | 2 | |
| CI1442 | 1 | 2923 | 80.1 | 95 | 140 | 7 | |

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| MEAN | 4037 |
| LSD(.05) | 614 |
| C.V. | 9.3 |

CLAY CENTER
NEBRASKA
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : |
|---------------------|------------------------|------------------------|---------------------------------------|-----------------------------------|
| NE82656 | 29 | 3404 | 76.8 | 75 |
| NE83407 | 28 | 3097 | 75.7 | 62 |
| NE84557 | 27 | 2803 | 79.3 | 74 |
| CI13996 | 2 | 2745 | 79.5 | 82 |
| TXGH105638 | 11 | 2734 | 77.1 | 66 |
| AGC-112 | 32 | 2714 | 76.9 | 66 |
| TXGH13622 | 13 | 2703 | 79.7 | 66 |
| NE82533 | 26 | 2697 | 77.8 | 70 |
| XH675 | 36 | 2669 | 77.8 | 71 |
| RL844677 | 30 | 2642 | 79.9 | 69 |
| TX84V1317 | 14 | 2641 | 80.9 | 64 |
| NA-W83-256 | 41 | 2631 | 77 | 64 |
| TX86A7041 | 17 | 2627 | 75.7 | 64 |
| IL80-1251 | 44 | 2622 | 79.2 | 67 |
| RL845472 | 31 | 2564 | 79.3 | 73 |
| XW161 | 35 | 2558 | 78.7 | 60 |
| XH685 | 37 | 2477 | 77.4 | 70 |
| CI17826 | 3 | 2470 | 77.7 | 65 |
| NA-W84-229 | 40 | 2428 | 77.8 | 63 |
| KS82C2338 | 25 | 2425 | 79.5 | 64 |
| OK86197 | 7 | 2340 | 80 | 63 |
| C0830034 | 22 | 2292 | 79.6 | 68 |
| IL83-7439 | 43 | 2265 | 77 | 65 |
| CI1442 | 1 | 2208 | 75.3 | 90 |
| C0830027 | 21 | 2194 | 80.2 | 65 |
| C0830014 | 23 | 2131 | 78.6 | 70 |
| OK86215 | 8 | 2104 | 78.4 | 63 |
| TX87HA1 | 45 | 2078 | 78.8 | 64 |
| TX84V1336 | 12 | 2067 | 79.3 | 63 |
| C082009 | 20 | 2062 | 78.4 | 67 |
| TX86V1109 | 18 | 2058 | 78.2 | 65 |
| XW141 | 34 | 2040 | 76 | 59 |
| AGC-113 | 33 | 2020 | 75.6 | 72 |
| TX86V1110 | 19 | 1956 | 76.9 | 67 |
| NA-W81-162-W | 42 | 1945 | 80 | 58 |
| OK84286 | 5 | 1923 | 79.2 | 59 |
| Bounty-122 | 38 | 1821 | 75.1 | 60 |
| TX81V6607-2 | 15 | 1770 | 82.2 | 57 |
| TX81V6582-2 | 10 | 1749 | 81.5 | 60 |
| WH180001 | 39 | 1723 | 76.6 | 67 |
| OK84287 | 6 | 1706 | 79.6 | 56 |
| TX84V1736 | 16 | 1640 | 79.5 | 61 |
| KS84HW196 | 24 | 1473 | 80.9 | 63 |
| OK84343 | 4 | 1277 | 77.1 | 60 |
| TXGH10989 | 9 | 960 | 77 | 64 |
| MEAN | | 2254 | | |
| LSD(.05) | | 625 | | |
| C.V. | | 17.0 | | |

ALLIANCE

NEBRASKA

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD KG/HA | : VOLUME WEIGHT KG/HL |
|---------------------|--------------------|---------------------|--------------------------------|
| AGC-113 | 33 | 4925 | 72.5 |
| AGC-112 | 32 | 4799 | 72.4 |
| TX84V1736 | 16 | 4780 | 72.9 |
| XH685 | 37 | 4778 | 73.5 |
| WH180001 | 39 | 4764 | 73.9 |
| TXGH10563B | 11 | 4735 | 73.9 |
| XH675 | 36 | 4690 | 72.9 |
| CI17826 | 3 | 4666 | 73 |
| TX87HA1 | 45 | 4623 | 76.8 |
| TX81V6582-2 | 10 | 4616 | 77.4 |
| IL80-1251 | 44 | 4606 | 73.7 |
| NE83407 | 28 | 4555 | 70.6 |
| NE82656 | 29 | 4552 | 71.5 |
| TX84V1317 | 14 | 4500 | 74.8 |
| TXGH13622 | 13 | 4457 | 75.2 |
| NA-W83-256 | 41 | 4443 | 74.7 |
| RL845472 | 31 | 4427 | 75.1 |
| NA-W81-162-W | 42 | 4380 | 76.9 |
| OK86215 | 8 | 4376 | 73.5 |
| NE82533 | 26 | 4374 | 77.4 |
| KS82C2338 | 25 | 4369 | 75.1 |
| XW161 | 35 | 4337 | 73.1 |
| TX86A7041 | 17 | 4335 | 69 |
| NA-W84-229 | 40 | 4327 | 75.5 |
| TX86V1110 | 19 | 4314 | 74.4 |
| TX86V1109 | 18 | 4261 | 74.3 |
| Bounty-122 | 38 | 4224 | 72.2 |
| XW141 | 34 | 4216 | 72 |
| OK86197 | 7 | 4182 | 74.7 |
| OK84286 | 5 | 4181 | 73.8 |
| RL844677 | 30 | 4167 | 71 |
| C0830027 | 21 | 4163 | 73.5 |
| C0830034 | 22 | 4162 | 70.7 |
| KS84HW196 | 24 | 4145 | 74.4 |
| IL83-7439 | 43 | 4096 | 77.4 |
| CI13996 | 2 | 4091 | 74.4 |
| NE84557 | 27 | 4086 | 78.4 |
| C082009 | 20 | 4015 | 72.6 |
| TX84V1336 | 12 | 3944 | 73.5 |
| TXGH10989 | 9 | 3893 | 74.2 |
| TX81V6607-2 | 15 | 3891 | 76.8 |
| OK84343 | 4 | 3862 | 76.1 |
| OK84287 | 6 | 3750 | 73.9 |
| C0830014 | 23 | 3452 | 75.3 |
| CI1442 | 1 | 3041 | 73.4 |
| MEAN | | 4301 | |
| LSD(.05) | | 482 | |
| C.V. | | 6.9 | |

BROOKINGS

S. DAKOTA

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1: |
|---------------------|------------------------|------------------------|---------------------------------------|-----------------------------------|---|
| NA-W83-256 | 41 | 2662 | 77.5 | 62 | 150 |
| XH675 | 36 | 2341 | 77.5 | 65 | 151 |
| C0830034 | 22 | 2313 | 76 | 63 | 151 |
| NE83407 | 28 | 2238 | 76.9 | 56 | 151 |
| OK84287 | 6 | 2199 | 80.2 | 58 | 150 |
| NE82656 | 29 | 2178 | 75.7 | 64 | 150 |
| AGC-113 | 33 | 2157 | 77.3 | 63 | 152 |
| IL83-7439 | 43 | 2130 | 77.9 | 62 | 151 |
| TX86V1110 | 19 | 2093 | 77.1 | 64 | 151 |
| TX81V6607-2 | 15 | 2045 | 82.8 | 58 | 151 |
| OK84286 | 5 | 1973 | 76.6 | 54 | 150 |
| OK86215 | 8 | 1970 | 76.9 | 67 | 151 |
| TX84V1336 | 12 | 1963 | 79.1 | 54 | 151 |
| NE84557 | 27 | 1902 | 79.7 | 62 | 150 |
| NE82533 | 26 | 1877 | 79.3 | 65 | 151 |
| TX87HA1 | 45 | 1874 | 78.8 | 65 | 150 |
| NA-W81-162-W | 42 | 1863 | 79.7 | 58 | 150 |
| XH685 | 37 | 1826 | 75.5 | 66 | 151 |
| OK86197 | 7 | 1813 | 78.9 | 59 | 151 |
| TX81V6582-2 | 10 | 1813 | 78 | 60 | 151 |
| XW161 | 35 | 1807 | 77.1 | 52 | 151 |
| C0830027 | 21 | 1794 | 80.2 | 68 | 151 |
| NA-W84-229 | 40 | 1748 | 76 | 58 | 151 |
| TX86A7041 | 17 | 1723 | 76.6 | 57 | 151 |
| AGC-112 | 32 | 1698 | 76 | 58 | 150 |
| CI17826 | 3 | 1692 | 76.2 | 55 | 150 |
| CI13996 | 2 | 1691 | 77.9 | 68 | 149 |
| RL844677 | 30 | 1690 | 79.5 | 65 | 150 |
| KS82C2338 | 25 | 1657 | 79.5 | 62 | 151 |
| RL845472 | 31 | 1608 | 78.6 | 61 | 150 |
| TX86V1109 | 18 | 1600 | 75.7 | 59 | 151 |
| TXGH13622 | 13 | 1592 | 76.9 | 51 | 151 |
| TXGH10563B | 11 | 1572 | 78.2 | 57 | 151 |
| IL80-1251 | 44 | 1567 | 76.9 | 60 | 151 |
| WH180001 | 39 | 1555 | 77.3 | 62 | 151 |
| KS84HW196 | 24 | 1484 | 81.3 | 58 | 150 |
| TX84V1317 | 14 | 1445 | 80 | 52 | 151 |
| C082009 | 20 | 1361 | 77.7 | 52 | 151 |
| TX84V1736 | 16 | 1345 | 78.2 | 47 | 151 |
| OK84343 | 4 | 1267 | 67.8 | 52 | 151 |
| Bounty-122 | 38 | 1253 | 72.4 | 58 | 150 |
| C0830014 | 23 | 1186 | 75.9 | 61 | 151 |
| CI1442 | 1 | 1140 | 68.2 | 67 | 154 |
| TXGH10989 | 9 | 1090 | 67.1 | 52 | 151 |
| XW141 | 34 | 1042 | 70.2 | 48 | 152 |
| MEAN | | 1752 | | | |
| LSD(.05) | | 548 | | | |
| C.V. | | 19.2 | | | |

PRESHO

S. DAKOTA

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1 : |
|---------------------|------------------------|------------------------|---------------------------------------|-----------------------------------|--|
| TXGH13622 | 13 | 2460 | 70.4 | 55 | 148 |
| AGC-112 | 32 | 2328 | 70.6 | 62 | 147 |
| TXGH10563B | 11 | 2154 | 69.5 | 58 | 148 |
| CI13996 | 2 | 2095 | 69.7 | 64 | 148 |
| OK86215 | 8 | 2082 | 70 | 57 | 147 |
| TX81V6607-2 | 15 | 2074 | 74.2 | 54 | 148 |
| NE84557 | 27 | 2047 | 66.4 | 58 | 149 |
| NA-W83-256 | 41 | 2042 | 68.9 | 60 | 149 |
| IL80-1251 | 44 | 2003 | 68.8 | 58 | 149 |
| NA-W81-162-W | 42 | 2001 | 69.1 | 53 | 149 |
| CI17826 | 3 | 1974 | 66.9 | 53 | 148 |
| RL845472 | 31 | 1966 | 71.1 | 57 | 150 |
| TX86V1109 | 18 | 1921 | 69.5 | 58 | 148 |
| XH675 | 36 | 1911 | 70.2 | 61 | 148 |
| NE83407 | 28 | 1902 | 69.5 | 58 | 150 |
| NE82533 | 26 | 1899 | 69.3 | 61 | 150 |
| OK86197 | 7 | 1891 | 71.1 | 54 | 147 |
| RL844677 | 30 | 1880 | 67.5 | 60 | 151 |
| TX81V6582-2 | 10 | 1839 | 67.3 | 59 | 150 |
| TX87HA1 | 45 | 1837 | 71.5 | 61 | 147 |
| OK84286 | 5 | 1794 | 67.8 | 55 | 149 |
| IL83-7439 | 43 | 1791 | 66.8 | 53 | 150 |
| NE82656 | 29 | 1779 | 67.1 | 61 | 150 |
| TX84V1336 | 12 | 1725 | 67.5 | 49 | 149 |
| KS82C2338 | 25 | 1723 | 69.3 | 59 | 149 |
| C0830034 | 22 | 1704 | 68.4 | 58 | 150 |
| C0830027 | 21 | 1689 | 71.5 | 58 | 149 |
| TX84V1317 | 14 | 1677 | 69.8 | 52 | 149 |
| WH180001 | 39 | 1660 | 68.8 | 58 | 150 |
| NA-W84-229 | 40 | 1636 | 68.2 | 52 | 151 |
| C082009 | 20 | 1614 | 69.3 | 52 | 150 |
| TXGH10989 | 9 | 1610 | 68.8 | 54 | 150 |
| KS84HW196 | 24 | 1608 | 71.5 | 56 | 147 |
| TX86V1110 | 19 | 1592 | 60 | 58 | 148 |
| XH685 | 37 | 1569 | 68.2 | 60 | 149 |
| C0830014 | 23 | 1560 | 68.8 | 62 | 148 |
| OK84287 | 6 | 1538 | 70.2 | 53 | 148 |
| TX86A7041 | 17 | 1510 | 63.1 | 56 | 150 |
| AGC-113 | 33 | 1481 | 62.8 | 56 | 151 |
| XW141 | 34 | 1423 | 64.6 | 58 | 151 |
| TX84V1736 | 16 | 1418 | 68.4 | 47 | 148 |
| Bounty-122 | 38 | 1402 | 66.4 | 60 | 148 |
| OK84343 | 4 | 1391 | 67.8 | 57 | 151 |
| CI1442 | 1 | 1361 | 67.1 | 69 | 155 |
| XW161 | 35 | 1343 | 68.2 | 50 | 148 |
| MEAN | | 1776 | | | |
| LSD(.05) | | 443 | | | |
| C.V. | | 15.3 | | | |

CASSELTON

N. DAKOTA

THREE REPLICATIONS

| C.I. OR SEL. NO. | : : ENTRY: : NO. : | : WINTER : : SURVIVAL : : % : |
|---------------------|--------------------------|-------------------------------------|
| CI1442 | 1 | 32 |
| CI13996 | 2 | 32 |
| CI17826 | 3 | 22 |
| OK84343 | 4 | 2 |
| OK84286 | 5 | 12 |
| OK84287 | 6 | 12 |
| OK86197 | 7 | 12 |
| OK86215 | 8 | 12 |
| TXGH10989 | 9 | 27 |
| TX81V6582-2 | 10 | 7 |
| TXGH10563B | 11 | 28 |
| TX84V1336 | 12 | 5 |
| TXGH13622 | 13 | 12 |
| TX84V1317 | 14 | 3 |
| TX81V6607-2 | 15 | 0 |
| TX84V1736 | 16 | 10 |
| TX86A7041 | 17 | 10 |
| TX86V1109 | 18 | 10 |
| TX86V1110 | 19 | 18 |
| C082009 | 20 | 5 |
| C0830027 | 21 | 0 |
| C0830034 | 22 | 2 |
| C0830014 | 23 | 2 |
| KS84HW196 | 24 | 3 |
| KS82C2338 | 25 | 5 |
| NE82533 | 26 | 8 |
| NE84557 | 27 | 12 |
| NE83407 | 28 | 20 |
| NE82656 | 29 | 35 |
| RL844677 | 30 | 13 |
| RL845472 | 31 | 18 |
| AGC-112 | 32 | 55 |
| AGC-113 | 33 | 33 |
| XW141 | 34 | 32 |
| XW161 | 35 | 3 |
| XH675 | 36 | 5 |
| XH685 | 37 | 17 |
| Bounty-122 | 38 | 0 |
| WH180001 | 39 | 2 |
| NA-W84-229 | 40 | 2 |
| NA-W83-256 | 41 | 8 |
| NA-W81-162-W | 42 | 3 |
| IL83-7439 | 43 | 33 |
| IL80-1251 | 44 | 25 |
| TX87HA1 | 45 | 30 |

COLUMBIA
MISSOURI
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD : KG/HA | : VOLUME : WEIGHT : KG/HL | : PLANT : HEIGHT : CM | : DAYS TO : HEADING : FROM 1/1 | : LEAF RUST: : SEV.:RESP: : % : 0-9: | : BYD : VIRUS : 0-9 |
|---------------------|--------------------|--------------------|---------------------------------|-----------------------------|--------------------------------------|--|---------------------------|
| TXGH13622 | 13 | 6424 | 77.1 | 91 | 131 | 40 | 7 |
| XH675 | 36 | 6413 | 74.9 | 92 | 132 | 12 | 5 |
| TX87HA1 | 45 | 6133 | 77.4 | 91 | 131 | 13 | 7 |
| OK86215 | 8 | 6056 | 76.1 | 89 | 130 | 10 | 6 |
| WH180001 | 39 | 6054 | 75.1 | 97 | 133 | 5 | 5 |
| AGC-112 | 32 | 6020 | 75.2 | 88 | 131 | 50 | 8 |
| TX81V6582-2 | 10 | 5993 | 76.8 | 83 | 130 | 7 | 8 |
| XH685 | 37 | 5935 | 74 | 88 | 133 | 10 | 5 |
| TX84V1317 | 14 | 5914 | 75.6 | 81 | 131 | 4 | 7 |
| TXGH10989 | 9 | 5910 | 73.4 | 87 | 132 | 7 | 5 |
| IL83-7439 | 43 | 5906 | 75.3 | 101 | 134 | . | 7 |
| OK84286 | 5 | 5894 | 76.2 | 86 | 131 | . | 5 |
| NA-W81-162-W | 42 | 5861 | 76.8 | 84 | 131 | 7 | 7 |
| RL844677 | 30 | 5810 | 75.9 | 86 | 135 | 4 | 5 |
| RL845472 | 31 | 5810 | 76.4 | 94 | 134 | 5 | 5 |
| TX81V6607-2 | 15 | 5689 | 76.9 | 81 | 131 | 4 | 6 |
| OK84287 | 6 | 5636 | 76.6 | 88 | 130 | 2 | 5 |
| OK86197 | 7 | 5578 | 75.3 | 91 | 129 | 17 | 7 |
| IL80-1251 | 44 | 5570 | 74.3 | 88 | 136 | 2 | 6 |
| XW161 | 35 | 5538 | 73.4 | 82 | 129 | . | 7 |
| KS82C2338 | 25 | 5517 | 77.9 | 88 | 130 | 10 | 7 |
| TX86V1109 | 18 | 5500 | 76 | 94 | 130 | . | 5 |
| TX84V1336 | 12 | 5459 | 74 | 86 | 130 | 3 | 8 |
| NA-W83-256 | 41 | 5443 | 74.2 | 88 | 134 | 4 | 5 |
| NE83407 | 28 | 5439 | 73.3 | 83 | 134 | 5 | 5 |
| C0830027 | 21 | 5276 | 77 | 90 | 131 | 5 | 6 |
| NE84557 | 27 | 5270 | 76.6 | 98 | 137 | 4 | 5 |
| TXGH10563B | 11 | 5259 | 76.2 | 88 | 130 | 40 | 8 |
| TX86A7041 | 17 | 5252 | 71.6 | 85 | 134 | 2 | 6 |
| C0830034 | 22 | 5249 | 75.5 | 97 | 135 | 17 | 6 |
| KS84HW196 | 24 | 5247 | 75.9 | 85 | 130 | 23 | 8 |
| AGC-113 | 33 | 5245 | 72.1 | 91 | 135 | 23 | 7 |
| TX84V1736 | 16 | 5205 | 76.8 | 78 | 129 | 15 | 8 |
| OK84343 | 4 | 5181 | 74 | 83 | 134 | . | 6 |
| NE82656 | 29 | 5149 | 72.6 | 85 | 136 | . | 5 |
| TX86V1110 | 19 | 5026 | 75.9 | 93 | 129 | . | 5 |
| Bounty-122 | 38 | 5026 | 73.7 | 87 | 131 | 10 | 8 |
| NE82533 | 26 | 4960 | 75.2 | 93 | 136 | 8 | 5 |
| CI17826 | 3 | 4923 | 75.6 | 89 | 133 | 43 | 8 |
| XW141 | 34 | 4839 | 67.6 | 82 | 135 | 2 | 6 |
| NA-W84-229 | 40 | 4777 | 74.4 | 84 | 133 | 4 | 6 |
| C0830014 | 23 | 4770 | 76.2 | 104 | 131 | 10 | 6 |
| CI13996 | 2 | 4271 | 72.1 | 105 | 136 | 23 | 6 |
| C082009 | 20 | 4049 | 75.2 | 94 | 136 | 5 | 6 |
| CI1442 | 1 | 3917 | 73.1 | 109 | 137 | 17 | 5 |
| MEAN | | 5431 | | | | | |
| LSD(.05) | | 1007 | | | | | |
| C.V. | | 11.5 | | | | | |

AMES

IOWA

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : KG/HA : | : VOLUME : WEIGHT : KG/HL : | : PLANT : HEIGHT : CM : | : DAYS TO : HEADING : FROM 1/1: | : DAYS TO : RIPENING: : FROM 1/1: | : LODGING : % : | : WINTER : SURVIVAL : % : |
|---------------------|------------------------|----------------------|-----------------------------------|-------------------------------|---------------------------------------|---|--------------------|---------------------------------|
| NE82656 | 29 | 4351 | 75.3 | 86 | 142 | 174 | 1 | 97 |
| TX87HA1 | 45 | 4344 | 76.8 | 82 | 139 | 175 | 0 | 90 |
| IL80-1251 | 44 | 4295 | 76.5 | 80 | 141 | 174 | 0 | 92 |
| AGC-113 | 33 | 4235 | 76.2 | 74 | 143 | 176 | 0 | 94 |
| NE83407 | 28 | 4154 | 75.6 | 75 | 140 | 175 | 1 | 88 |
| TX86V1110 | 19 | 4080 | 76.1 | 77 | 139 | 171 | 0 | 94 |
| AGC-112 | 32 | 4013 | 73.4 | 76 | 139 | 174 | 0 | 89 |
| IL83-7439 | 43 | 3878 | 77.4 | 73 | 143 | 173 | 1 | 94 |
| TXGH13622 | 13 | 3847 | 76.5 | 72 | 141 | 176 | 0 | 69 |
| RL845472 | 31 | 3766 | 77.4 | 82 | 141 | 174 | 0 | 93 |
| CI13996 | 2 | 3753 | 76.8 | 92 | 142 | 174 | 6 | 94 |
| TX86V1109 | 18 | 3688 | 75.9 | 76 | 139 | 171 | 0 | 96 |
| NE82533 | 26 | 3528 | 76 | 80 | 143 | 176 | 1 | 77 |
| XW161 | 35 | 3488 | 76.6 | 60 | 137 | 172 | 0 | 95 |
| CI17826 | 3 | 3475 | 74.9 | 78 | 139 | 175 | 0 | 86 |
| TX86A7041 | 17 | 3414 | 75.6 | 69 | 142 | 173 | 0 | 83 |
| OK86215 | 8 | 3401 | 77.8 | 73 | 139 | 173 | 1 | 85 |
| OK84286 | 5 | 3331 | 79.7 | 70 | 140 | 175 | 0 | 81 |
| XH675 | 36 | 3250 | 76.6 | 76 | 140 | 176 | 0 | 77 |
| RL844677 | 30 | 3203 | 78.6 | 80 | 142 | 176 | 2 | 73 |
| TX84V1736 | 16 | 3170 | 79.3 | 64 | 139 | 172 | 2 | 73 |
| XH685 | 37 | 3163 | 76.2 | 77 | 140 | 176 | 1 | 85 |
| OK84287 | 6 | 3134 | 79.2 | 69 | 140 | 175 | 1 | 73 |
| NA-W83-256 | 41 | 3022 | 76.1 | 70 | 141 | 175 | 1 | 81 |
| TXGH105638 | 11 | 2975 | 74.3 | 73 | 140 | 174 | 1 | 69 |
| CI1442 | 1 | 2948 | 76.5 | 98 | 148 | 179 | 9 | 93 |
| NE84557 | 27 | 2921 | 79.1 | 80 | 145 | 177 | 1 | 45 |
| C0830034 | 22 | 2878 | 78.3 | 78 | 144 | 177 | 0 | 60 |
| OK86197 | 7 | 2851 | 78.2 | 70 | 141 | 173 | 0 | 59 |
| TX84V1336 | 12 | 2627 | 76.9 | 63 | 140 | 174 | 0 | 55 |
| XW141 | 34 | 2365 | 70 | 62 | 142 | 176 | 0 | 84 |
| NA-W81-162-W | 42 | 2365 | 78.8 | 58 | 142 | 176 | 2 | 47 |
| KS82C2338 | 25 | 2183 | 78.9 | 69 | 140 | 174 | 0 | 47 |
| C082009 | 20 | 2136 | 77.4 | 75 | 145 | 179 | 0 | 70 |
| C0830027 | 21 | 2047 | 78.7 | 72 | 141 | 176 | 1 | 40 |
| TX84V1317 | 14 | 1867 | 79.2 | 60 | 140 | 175 | 0 | 22 |
| Bounty-122 | 38 | 1825 | 73.8 | 67 | 143 | 177 | 1 | 32 |
| KS84HW196 | 24 | 1401 | 79.9 | 62 | 142 | 174 | 0 | 28 |
| WH180001 | 39 | 1219 | 74.4 | 73 | 143 | 176 | 1 | 22 |
| C0830014 | 23 | 1078 | 76.4 | 68 | 141 | 177 | 0 | 17 |
| NA-W84-229 | 40 | 1029 | 77.5 | 56 | 143 | 178 | 0 | 12 |
| TX81V6582-2 | 10 | 726 | . | 58 | 143 | 176 | 0 | 12 |
| OK84343 | 4 | 460 | . | 63 | 145 | 176 | 0 | 5 |
| TXGH10989 | 9 | 448 | . | 65 | 145 | 178 | 0 | 4 |
| TX81V6607-2 | 15 | 195 | . | 48 | 145 | 175 | 0 | 2 |

MEAN 2812
LSD(.05) 1087
C.V. 23.7

URBANA
ILLINOIS
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1 : | : WINTER : : SURVIVAL : : % : |
|---------------------|------------------------|------------------------|---------------------------------------|-----------------------------------|--|-------------------------------------|
| TX87HA1 | 45 | 5070 | 75.3 | 87 | 136 | 100 |
| TXGH13622 | 13 | 4881 | 76.5 | 87 | 135 | 100 |
| TXGH10563B | 11 | 4801 | 74.2 | 81 | 136 | 100 |
| OK86215 | 8 | 4795 | 76 | 82 | 135 | 100 |
| TX86V1110 | 19 | 4707 | 74.8 | 85 | 135 | 100 |
| NE83407 | 28 | 4700 | 73.9 | 85 | 138 | 100 |
| OK84286 | 5 | 4695 | 77 | 82 | 136 | 100 |
| TX86V1109 | 18 | 4641 | 75.3 | 92 | 136 | 100 |
| RL844677 | 30 | 4591 | 75.5 | 94 | 138 | 100 |
| AGC-112 | 32 | 4525 | 73.7 | 78 | 136 | 100 |
| XW161 | 35 | 4518 | 74.7 | 75 | 136 | 100 |
| OK84287 | 6 | 4515 | 77.8 | 80 | 136 | 100 |
| IL80-1251 | 44 | 4488 | 76.2 | 90 | 139 | 100 |
| IL83-7439 | 43 | 4476 | 77 | 91 | 140 | 100 |
| CI17826 | 3 | 4472 | 73.9 | 80 | 136 | 100 |
| NA-W83-256 | 41 | 4453 | 74.7 | 88 | 138 | 100 |
| KS84HW196 | 24 | 4436 | 77.5 | 81 | 136 | 100 |
| AGC-113 | 33 | 4403 | 74.4 | 89 | 139 | 100 |
| TX84V1736 | 16 | 4361 | 76 | 74 | 135 | 100 |
| C0830034 | 22 | 4354 | 74.8 | 90 | 140 | 100 |
| TX84V1336 | 12 | 4350 | 75.7 | 76 | 135 | 100 |
| NE82533 | 26 | 4348 | 75.8 | 91 | 139 | 100 |
| NE84557 | 27 | 4318 | 76.5 | 96 | 141 | 100 |
| OK84343 | 4 | 4291 | 73.9 | 78 | 138 | 100 |
| TX84V1317 | 14 | 4254 | 76.4 | 76 | 135 | 100 |
| XH675 | 36 | 4228 | 73.3 | 88 | 137 | 93 |
| KS82C2338 | 25 | 4169 | 76.6 | 81 | 136 | 100 |
| OK86197 | 7 | 4149 | 75.8 | 81 | 136 | 100 |
| NE82656 | 29 | 4044 | 71.7 | 86 | 140 | 100 |
| RL845472 | 31 | 4007 | 76.5 | 90 | 138 | 100 |
| XH685 | 37 | 3991 | 72.7 | 90 | 137 | 100 |
| NA-W81-162-W | 42 | 3963 | 77.6 | 72 | 136 | 100 |
| C0830027 | 21 | 3860 | 76.7 | 86 | 136 | 100 |
| TX86A7041 | 17 | 3847 | 72.8 | 74 | 139 | 100 |
| XW141 | 34 | 3691 | 71.3 | 79 | 139 | 100 |
| C0830014 | 23 | 3663 | 74.4 | 91 | 137 | 100 |
| CI13996 | 2 | 3553 | 75.4 | 97 | 141 | 100 |
| WH180001 | 39 | 3426 | 72.9 | 84 | 139 | 100 |
| C082009 | 20 | 3335 | 75.4 | 90 | 139 | 100 |
| Bounty-122 | 38 | 3108 | 70.9 | 80 | 137 | 100 |
| NA-W84-229 | 40 | 2837 | 72.8 | 72 | 138 | 100 |
| CI1442 | 1 | 2626 | 71.2 | 98 | 142 | 100 |
| TXGH10989 | 9 | 2598 | 72 | 69 | 137 | 45 |
| TX81V6582-2 | 10 | 1953 | 74.5 | 58 | 137 | 33 |
| TX81V6607-2 | 15 | 1128 | 75.4 | 59 | 138 | 8 |
| MEAN | | 4036 | | | | |
| LSD(.05) | | 645 | | | | |
| C.V. | | 9.8 | | | | |

LIND
WASHINGTON
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD KG/HA | : VOLUME WEIGHT KG/HL | : PLANT HEIGHT CM | : DAYS TO HEADING FROM 1/1: |
|---------------------|--------------------|---------------------|--------------------------------|----------------------------|--------------------------------------|
| RL844677 | 30 | 2145 | 80.2 | 64 | 141 |
| NA-W84-229 | 40 | 2069 | 79.9 | 58 | 139 |
| NE84557 | 27 | 2049 | 79.3 | 66 | 141 |
| TX84V1336 | 12 | 1997 | 81 | 60 | 137 |
| WH180001 | 39 | 1997 | 77.1 | 64 | 140 |
| C0830034 | 22 | 1984 | 79.3 | 56 | 141 |
| XH685 | 37 | 1975 | 77.5 | 60 | 139 |
| TX86A7041 | 17 | 1957 | 76.8 | 53 | 141 |
| RL845472 | 31 | 1946 | 78.3 | 60 | 138 |
| AGC-112 | 32 | 1941 | 78.2 | 58 | 138 |
| TX84V1736 | 16 | 1907 | 79.2 | 51 | 137 |
| NE82533 | 26 | 1901 | 78.6 | 59 | 140 |
| CI17826 | 3 | 1887 | 79.1 | 52 | 138 |
| C082009 | 20 | 1881 | 79.2 | 64 | 142 |
| CI13996 | 2 | 1825 | 79.9 | 66 | 137 |
| C0830014 | 23 | 1820 | 79.6 | 70 | 137 |
| TXGH13622 | 13 | 1744 | 78.7 | 57 | 138 |
| XH675 | 36 | 1740 | 76.9 | 60 | 140 |
| AGC-113 | 33 | 1690 | 78 | 58 | 142 |
| XW161 | 35 | 1688 | 80.2 | 55 | 137 |
| TXGH10563B | 11 | 1679 | 77.7 | 59 | 137 |
| NE82656 | 29 | 1679 | 76.9 | 58 | 143 |
| NA-W83-256 | 41 | 1632 | 76.5 | 56 | 141 |
| IL83-7439 | 43 | 1630 | 77.4 | 55 | 138 |
| TX86V1109 | 18 | 1592 | 77 | 61 | 138 |
| KS82C2338 | 25 | 1592 | 79.6 | 59 | 137 |
| TX81V6582-2 | 10 | 1584 | 80.5 | 56 | 138 |
| KS84HW196 | 24 | 1567 | 79.9 | 57 | 137 |
| C0830027 | 21 | 1558 | 79.3 | 60 | 141 |
| TX81V6607-2 | 15 | 1547 | 80.1 | 52 | 139 |
| Bounty-122 | 38 | 1547 | 76.2 | 63 | 140 |
| OK86215 | 8 | 1482 | 77.1 | 52 | 138 |
| NE83407 | 28 | 1439 | 77 | 56 | 142 |
| CI1442 | 1 | 1437 | 78 | 68 | 146 |
| IL80-1251 | 44 | 1436 | 76.1 | 61 | 141 |
| TX84V1317 | 14 | 1403 | 79.7 | 57 | 138 |
| OK84286 | 5 | 1374 | 76.9 | 58 | 142 |
| NA-W81-162-W | 42 | 1365 | 78.9 | 51 | 140 |
| OK84343 | 4 | 1341 | 75.7 | 60 | 141 |
| TX86V1110 | 19 | 1325 | 75.9 | 62 | 138 |
| TX87HA1 | 45 | 1314 | 78.8 | 60 | 137 |
| TXGH10989 | 9 | 1309 | 77.4 | 59 | 139 |
| XW141 | 34 | 1298 | 77.3 | 53 | 142 |
| OK86197 | 7 | 1121 | 77 | 53 | 139 |
| OK84287 | 6 | 1085 | 76.8 | 57 | 142 |
| MEAN | | 1655 | | | |
| LSD(.05) | | 304 | | | |
| C.V. | | 11.2 | | | |

ABERDEEN

IDAHO

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1 : | : DAYS TO : : RIPENING : : FROM 1/1 : | : LODGING : : 0-9 : | : STRAW : : STRENGTH : : 1-5 : |
|---------------------|------------------------|------------------------|-----------------------------------|--|---|------------------------|--------------------------------------|
| TX84V1336 | 12 | 6427 | 86 | 152 | 188 | 0 | 3 |
| TXGH105638 | 11 | 6143 | 92 | 154 | 189 | 3 | 3 |
| AGC-113 | 33 | 5865 | 104 | 159 | 189 | 0 | 4 |
| C0830034 | 22 | 5782 | 98 | 159 | 187 | 1 | 3 |
| CI17826 | 3 | 5515 | 92 | 153 | 185 | 1 | 2 |
| TX81V6607-2 | 15 | 5499 | 82 | 154 | 187 | 0 | 3 |
| TX84V1317 | 14 | 5376 | 81 | 153 | 186 | 0 | 3 |
| TXGH13622 | 13 | 5333 | 92 | 156 | 188 | 1 | 3 |
| C0830027 | 21 | 5314 | 95 | 155 | 188 | 2 | 4 |
| NA-W84-229 | 40 | 5214 | 81 | 157 | 186 | 1 | 1 |
| WH180001 | 39 | 5210 | 96 | 157 | 185 | 0 | 3 |
| NA-W83-256 | 41 | 5177 | 93 | 159 | 188 | 2 | 2 |
| C082009 | 20 | 5135 | 104 | 157 | 189 | 1 | 2 |
| XW161 | 35 | 5130 | 76 | 151 | 185 | 0 | 1 |
| IL80-1251 | 44 | 5043 | 90 | 155 | 184 | 0 | 3 |
| Bounty-122 | 38 | 4994 | 91 | 158 | 189 | 0 | 2 |
| AGC-112 | 32 | 4973 | 86 | 155 | 185 | 1 | 2 |
| XW141 | 34 | 4970 | 82 | 156 | 187 | 0 | 2 |
| TX86V1110 | 19 | 4954 | 96 | 154 | 184 | 0 | 3 |
| NE83407 | 28 | 4940 | 91 | 158 | 188 | 0 | 3 |
| OK86215 | 8 | 4938 | 91 | 151 | 187 | 0 | 2 |
| TX86V1109 | 18 | 4887 | 95 | 154 | 184 | 0 | 3 |
| TX87HA1 | 45 | 4886 | 92 | 155 | 188 | 1 | 3 |
| NA-W81-162-W | 42 | 4851 | 82 | 156 | 199 | 0 | 2 |
| TXGH10989 | 9 | 4831 | 86 | 152 | 186 | 1 | 3 |
| TX86A7041 | 17 | 4791 | 82 | 159 | 186 | 1 | 3 |
| IL83-7439 | 43 | 4771 | 93 | 156 | 186 | 0 | 1 |
| XH675 | 36 | 4751 | 95 | 157 | 186 | 0 | 3 |
| TX81V6582-2 | 10 | 4744 | 80 | 150 | 185 | 1 | 2 |
| NE82533 | 26 | 4739 | 86 | 156 | 186 | 0 | 3 |
| XH685 | 37 | 4683 | 94 | 156 | 186 | 1 | 3 |
| RL845472 | 31 | 4607 | 91 | 155 | 186 | 2 | 4 |
| KS82C2338 | 25 | 4585 | 87 | 155 | 185 | 0 | 3 |
| NE84557 | 27 | 4575 | 94 | 156 | 183 | 0 | 2 |
| TX84V1736 | 16 | 4534 | 76 | 151 | 199 | 1 | 2 |
| OK84287 | 6 | 4503 | 88 | 155 | 188 | 0 | 2 |
| RL844677 | 30 | 4468 | 103 | 159 | 189 | 0 | 3 |
| OK84286 | 5 | 4446 | 84 | 155 | 186 | 1 | 3 |
| OK84343 | 4 | 4431 | 81 | 156 | 185 | 0 | 2 |
| C0830014 | 23 | 4411 | 109 | 156 | 185 | 1 | 2 |
| CI13996 | 2 | 4393 | 112 | 155 | 186 | 4 | 5 |
| NE82656 | 29 | 4367 | 92 | 159 | 187 | 1 | 3 |
| CI1442 | 1 | 3894 | 105 | 161 | 190 | 5 | 5 |
| OK86197 | 7 | 3782 | 85 | 151 | 184 | 0 | 3 |
| KS84HW196 | 24 | 3323 | 89 | 153 | 198 | 1 | 2 |
| MEAN | | 4893 | | | | | |
| LSD(.05) | | 1112 | | | | | |
| C.V. | | 13.9 | | | | | |

Table 2. Summary of mean yields (kg/ha) of 45 wheats grown in the 1988 Southern Regional Performance Nursery at 28 locations with state means and ranks.

| VARIETY OR PEDIGREE | C.I. OR SEL. NO. | ENTRY: NO. | BUSHLAND (DRYL.) TEXAS | BUSHLAND (IRR.) TEXAS | CHILLI-COTHE TEXAS | DALLAS TEXAS | TEXAS STATE MEAN | | | | | |
|---|------------------|------------|------------------------|-----------------------|--------------------|--------------|------------------|----|------|----|------|----|
| TX71A562-6*4/Amigo*4//Largo | TXGH13622 | 13 | 3160 | 3 | 5102 | 10 | 4580 | 5 | 3973 | 7 | 4204 | 3 |
| TAM-105*4/Amigo*4//Largo | TXGH105638 | 11 | 3039 | 5 | 5502 | 4 | 4492 | 9 | 3630 | 18 | 4166 | 5 |
| HRW Selection | AGC-112 | 32 | 3014 | 6 | 5142 | 8 | 4060 | 33 | 3395 | 27 | 3903 | 12 |
| Winter Wheat Hybrid | XH675 | 36 | 2650 | 17 | 4922 | 12 | 4084 | 29 | 4222 | 1 | 3970 | 11 |
| KS73146/TX71A1039 | TX84V1336 | 12 | 3157 | 4 | 5661 | 3 | 4311 | 13 | 3933 | 8 | 4265 | 2 |
| TAM W-101/W603//W558 | XW161 | 35 | 1950 | 38 | 5360 | 5 | 4723 | 3 | 3984 | 6 | 4004 | 9 |
| Must/3/T-105*4/Ami*4//Largo, TXGH10289 | TX87HA1 | 45 | 2825 | 12 | 5273 | 6 | 4557 | 6 | 3702 | 17 | 4089 | 6 |
| Winter Wheat Line | RL844677 | 30 | 2449 | 21 | 4009 | 36 | 4730 | 2 | 3770 | 14 | 3739 | 18 |
| Winter Wheat Hybrid | XH685 | 37 | 2637 | 18 | 4649 | 20 | 4069 | 31 | 3924 | 9 | 3820 | 15 |
| OK79257/Century Sib/2/Chisholm | OK86215 | 8 | 2672 | 16 | 4878 | 14 | 4046 | 34 | 3907 | 10 | 3876 | 13 |
| TX71A374-4/TX71A1039-V1 | TX84V1317 | 14 | 2977 | 7 | 5107 | 9 | 4389 | 11 | 3474 | 21 | 3987 | 10 |
| TX69A330/IL76-3820 | IL80-1251 | 44 | 2349 | 26 | 4400 | 24 | 4270 | 15 | 3136 | 37 | 3539 | 28 |
| Payne*2/C0725052 | OK84286 | 5 | 2825 | 12 | 4887 | 13 | 3974 | 37 | 3714 | 16 | 3850 | 14 |
| Payne/W78-069 | NA-W83-256 | 41 | 2369 | 24 | 4220 | 29 | 4066 | 32 | 4094 | 4 | 3687 | 21 |
| Brule/3/Parker*4/Agent//Belot.198/Lcr | NE82656 | 29 | 1589 | 43 | 4036 | 34 | 4176 | 18 | 3354 | 28 | 3289 | 35 |
| TAM-108/Arkan | TX86A7041 | 17 | 2319 | 30 | 4142 | 30 | 4152 | 21 | 4192 | 2 | 3701 | 20 |
| TX71A1039-V1*3/Amigo | TX81V6607-2 | 15 | 3685 | 1 | 6226 | 1 | 4741 | 1 | 3560 | 19 | 4553 | 1 |
| Complex Pedigree | NE83407 | 28 | 2043 | 34 | 4014 | 35 | 4317 | 12 | 3396 | 26 | 3442 | 32 |
| 74cb462/Trapper//Vona | C0830027 | 21 | 2839 | 10 | 4779 | 16 | 4656 | 4 | 3775 | 13 | 4012 | 8 |
| C05926//7C/Tobari 63/3/Baca | C0830034 | 22 | 2857 | 9 | 3902 | 37 | 4140 | 23 | 3326 | 29 | 3556 | 27 |
| HRW Selection | AGC-113 | 33 | 2435 | 22 | 2966 | 43 | 4096 | 28 | 3494 | 20 | 3248 | 40 |
| TAM-105 | C117826 | 3 | 2835 | 11 | 4097 | 31 | 3717 | 41 | 2770 | 42 | 3355 | 34 |
| OK11252A/W79-1226 | NA-W81-162-W | 42 | 2329 | 27 | 4487 | 22 | 4542 | 7 | 3791 | 12 | 3787 | 17 |
| Winter Wheat Line | RL845472 | 31 | 2570 | 19 | 4297 | 28 | 4176 | 18 | 3297 | 32 | 3585 | 26 |
| Sturdy*3/Amigo | TX81V6582-2 | 10 | 3373 | 2 | 5984 | 2 | 4311 | 13 | 3115 | 38 | 4195 | 4 |
| Payne*2/C0725052 | OK84287 | 6 | 2677 | 15 | 4711 | 18 | 3797 | 38 | 3420 | 24 | 3651 | 23 |
| TAM-106 resel./TX69D4819 | TX84V1736 | 16 | 2740 | 14 | 5183 | 7 | 4165 | 20 | 4081 | 5 | 4042 | 7 |
| Bulk Selection | KS82C2338 | 25 | 2361 | 25 | 4694 | 19 | 4075 | 30 | 3298 | 31 | 3607 | 24 |
| Rannaya/NE701136//C113449/Ctk | TX86V1110 | 19 | 2326 | 28 | 4048 | 33 | 4398 | 10 | 3303 | 30 | 3518 | 29 |
| Wrr/Sut//MoW6811/3/Aga S/4/NE68457/Ctk78 | NE84557 | 27 | 2402 | 23 | 3249 | 39 | 4235 | 16 | 3177 | 34 | 3265 | 39 |
| Rannaya/NE701136//C113449/Ctk | TX86V1109 | 18 | 2063 | 33 | 4072 | 32 | 4131 | 24 | 3757 | 15 | 3506 | 30 |
| Bounty Hybrid Wheat | WH180001 | 39 | 2031 | 35 | 4407 | 23 | 4122 | 25 | 3113 | 39 | 3418 | 33 |
| Aurora/2*TAM W-101 | OK84343 | 4 | 2260 | 31 | 4974 | 11 | 4013 | 35 | 3409 | 25 | 3664 | 22 |
| Hawk/OK80099 | OK86197 | 7 | 2460 | 20 | 4341 | 27 | 3670 | 42 | 3905 | 11 | 3594 | 25 |
| W79-227/Payne | NA-W84-229 | 40 | 1927 | 40 | 4781 | 15 | 4001 | 36 | 3170 | 36 | 3470 | 31 |
| IL77-4259/IL76-3845 | IL83-7439 | 43 | 1541 | 44 | 3823 | 38 | 3757 | 40 | 3078 | 40 | 3050 | 42 |
| KS73167/Agate//Sage sib | NE82533 | 26 | 1841 | 42 | 3045 | 42 | 4120 | 27 | 3294 | 33 | 3075 | 41 |
| TAM W-101*4/Amigo*4//Largo | TXGH10989 | 9 | 2861 | 8 | 4757 | 17 | 4147 | 22 | 3471 | 22 | 3809 | 16 |
| Bounty Hybrid Wheat | Bounty-122 | 38 | 1972 | 37 | 4642 | 21 | 4122 | 25 | 4190 | 3 | 3732 | 19 |
| Bezostaya/TAM W-101//W558 | XW141 | 34 | 1875 | 41 | 4344 | 26 | 4201 | 17 | 2699 | 43 | 3279 | 37 |
| Scout 66 | C113996 | 2 | 1987 | 36 | 2870 | 44 | 3762 | 39 | 2910 | 41 | 2882 | 43 |
| Bsn/Strling//3*Sut/3/Eag/4/Pinnacle/2*Eag | KS84HW196 | 24 | 2321 | 29 | 4389 | 25 | 3237 | 44 | 3171 | 35 | 3279 | 38 |
| 74cb452/Vona//Baca | C0830014 | 23 | 1949 | 39 | 3210 | 40 | 4506 | 8 | 3465 | 23 | 3282 | 36 |
| 74F878/Wings//Vona | C082009 | 20 | 2114 | 32 | 3152 | 41 | 3654 | 43 | 2565 | 44 | 2871 | 44 |
| Kharkof | C11442 | 1 | 1017 | 45 | 1734 | 45 | 2849 | 45 | 1343 | 45 | 1736 | 45 |
| MEAN | | 2437 | 4410 | | 4141 | | 3461 | | 3612 | | | |
| LSD(.05) | | 475 | 500 | | 532 | | 442 | | 588 | | | |
| C.V. | | 13.9 | 6.9 | | 7.9 | | 7.8 | | 8.9 | | | |

Table 2. Continued.

| C.I. OR SEL. NO. | ENTRY: NO. | LINCOLN NEBRASKA | CLAY CENTER NEBRASKA | ALLIANCE NEBRASKA | NEBRASKA STATE MEAN | AKRON COLORADO | BURLINGTON COLORADO | JULESBURG COLORADO | COLORADO STATE MEAN |
|---------------------|---------------|---------------------|----------------------------|----------------------|------------------------|-------------------|------------------------|-----------------------|------------------------|
| TXGH13622 | 13 | 4721 2 | 2703 7 | 4457 15 | 3960 3 | 1835 1 | 2715 17 | 1567 14 | 2039 7 |
| TXGH10563B | 11 | 4589 5 | 2734 5 | 4735 6 | 4019 2 | 1699 5 | 2817 12 | 1538 16 | 2018 9 |
| AGC-112 | 32 | 4779 1 | 2714 6 | 4799 2 | 4097 1 | 1822 2 | 3175 1 | 1921 7 | 2306 1 |
| XH675 | 36 | 4154 22 | 2669 9 | 4690 7 | 3838 9 | 1378 22 | 2309 39 | 1434 23 | 1707 30 |
| TX84V1336 | 12 | 4060 25 | 2067 29 | 3944 39 | 3357 32 | 1423 17 | 3122 2 | 1043 39 | 1863 18 |
| XW161 | 35 | 4600 4 | 2558 16 | 4337 22 | 3832 10 | 1266 25 | 2647 23 | 1337 25 | 1750 25 |
| TX87HA1 | 45 | 4562 6 | 2078 28 | 4623 9 | 3754 14 | 1547 10 | 2851 8 | 2016 4 | 2138 5 |
| RL844677 | 30 | 4636 3 | 2642 10 | 4167 31 | 3815 11 | 1534 11 | 2748 16 | 1550 15 | 1944 11 |
| XH685 | 37 | 4329 16 | 2477 17 | 4778 4 | 3861 8 | 1113 40 | 2819 11 | 1485 19 | 1805 22 |
| OK86215 | 8 | 4434 9 | 2104 27 | 4376 19 | 3638 18 | 1315 24 | 2932 6 | 1473 21 | 1907 13 |
| TX84V1317 | 14 | 4470 8 | 2641 11 | 4500 14 | 3870 6 | 1325 23 | 2693 19 | 1057 38 | 1692 32 |
| IL80-1251 | 44 | 4369 13 | 2622 14 | 4606 11 | 3866 7 | 1192 35 | 2698 18 | 1732 10 | 1874 17 |
| OK84286 | 5 | 3905 27 | 1923 36 | 4181 30 | 3336 33 | 1416 18 | 2764 15 | 1081 37 | 1754 23 |
| NA-W83-256 | 41 | 3838 30 | 2631 12 | 4443 16 | 3637 19 | 1198 32 | 2526 31 | 1485 19 | 1736 27 |
| NE82656 | 29 | 3835 31 | 3404 1 | 4552 13 | 3931 4 | 1750 4 | 2820 10 | 2078 3 | 2216 3 |
| TX86A7041 | 17 | 4228 20 | 2627 13 | 4335 23 | 3730 16 | 1085 41 | 2371 37 | 936 44 | 1464 41 |
| TX81V6607-2 | 15 | 4178 21 | 1770 38 | 3891 41 | 3280 35 | 1508 12 | 2669 21 | 1320 26 | 1832 19 |
| NE83407 | 28 | 4006 26 | 3097 2 | 4555 12 | 3886 5 | 1393 21 | 2451 33 | 1577 13 | 1807 21 |
| C0830027 | 21 | 4109 24 | 2194 25 | 4163 32 | 3489 29 | 1205 30 | 2786 13 | 960 43 | 1650 35 |
| C0830034 | 22 | 4114 10 | 2292 22 | 4162 33 | 3623 20 | 1124 38 | 2001 41 | 1521 17 | 1549 39 |
| AGC-113 | 33 | 4472 7 | 2020 33 | 4925 1 | 3806 13 | 1493 13 | 2488 32 | 1491 18 | 1731 28 |
| C117826 | 3 | 4295 18 | 2470 18 | 4666 8 | 3810 12 | 1582 8 | 2396 35 | 1679 11 | 1886 16 |
| NA-W81-162-W | 42 | 4380 12 | 1945 35 | 4380 18 | 3568 24 | 1221 28 | 2363 38 | 1491 18 | 1692 33 |
| RL845472 | 31 | 4152 23 | 2564 15 | 4427 17 | 3714 17 | 1643 7 | 2968 4 | 2254 1 | 2289 2 |
| TX81V6582-2 | 10 | 4351 15 | 1749 39 | 4616 10 | 3572 22 | 1194 33 | 2784 14 | 1260 30 | 1746 26 |
| OK84287 | 6 | 3824 32 | 1706 41 | 3750 43 | 3093 40 | 1193 34 | 2841 9 | 1042 40 | 1692 31 |
| TX84V1736 | 16 | 3174 43 | 1640 42 | 4780 3 | 3198 36 | 1447 15 | 1696 45 | 1139 36 | 1427 43 |
| K582C2338 | 25 | 3672 37 | 2425 20 | 4369 21 | 3488 30 | 1400 20 | 2964 5 | 2088 2 | 2151 4 |
| TX86V1110 | 19 | 3708 35 | 1956 34 | 4314 25 | 3326 34 | 1044 42 | 2635 24 | 1253 31 | 1644 36 |
| NE84557 | 27 | 4360 14 | 2803 3 | 4086 37 | 3750 15 | 1568 9 | 2550 30 | 2006 5 | 2041 6 |
| TX86V1109 | 18 | 4389 11 | 2058 31 | 4261 26 | 3569 23 | 987 43 | 2577 29 | 1280 28 | 1615 37 |
| WH180001 | 39 | 3679 36 | 1723 40 | 4764 5 | 3389 31 | 1228 27 | 2621 27 | 1980 6 | 1943 12 |
| OK84343 | 4 | 3849 29 | 1277 44 | 3862 42 | 2996 43 | 1782 3 | 2873 7 | 1449 22 | 2035 8 |
| OK86197 | 7 | 4232 19 | 2340 21 | 4182 29 | 3585 21 | 1217 29 | 2619 28 | 1649 12 | 1828 20 |
| NA-W84-229 | 40 | 3880 28 | 2428 19 | 4327 24 | 3545 26 | 1122 39 | 2649 22 | 1196 35 | 1656 34 |
| IL83-7439 | 43 | 4320 17 | 2265 23 | 4096 35 | 3560 25 | 1434 16 | 2427 34 | 1290 27 | 1717 29 |
| NE82533 | 26 | 3490 40 | 2697 8 | 4374 20 | 3521 27 | 1458 14 | 2686 20 | 1733 9 | 1959 10 |
| TXGH10989 | 9 | 3806 33 | 960 45 | 3893 40 | 2886 44 | 1649 6 | 2629 26 | 980 42 | 1752 24 |
| Bounty-122 | 38 | 3212 42 | 1821 37 | 4224 27 | 3086 41 | 1233 26 | 1873 43 | 1198 34 | 1435 42 |
| XW141 | 34 | 3120 44 | 2040 32 | 4216 28 | 3126 37 | 1141 37 | 1821 44 | 990 41 | 1317 44 |
| C113996 | 2 | 3719 34 | 2745 4 | 4091 36 | 3518 28 | 1203 31 | 2630 25 | 1866 8 | 1900 14 |
| K584HW196 | 24 | 3665 38 | 1473 43 | 4145 34 | 3095 39 | 1407 19 | 3025 3 | 1234 32 | 1889 15 |
| C0830014 | 23 | 3549 39 | 2131 26 | 3452 44 | 3044 42 | 791 45 | 2378 36 | 1408 24 | 1526 40 |
| C082009 | 20 | 3217 41 | 2062 30 | 4015 38 | 3098 38 | 1179 36 | 2230 40 | 1273 29 | 1561 38 |
| C11442 | 1 | 2923 45 | 2208 24 | 3041 45 | 2724 45 | 832 44 | 1888 42 | 784 45 | 1168 45 |
| MEAN | | 4037 | 2254 | 4301 | 3531 | 1346 | 2589 | 1441 | 1792 |
| LSD(.05) | | 614 | 625 | 482 | 583 | 459 | 585 | 548 | 404 |
| C.V. | | 9.3 | 17.0 | 6.9 | 10.0 | 20.9 | 13.8 | 23.3 | 18.2 |

Table 2. Continued.

| C.I. OR SEL. NO. | ENTRY: NO. | HUTCHINSON*: KANSAS | HAYS KANSAS | MANHATTAN KANSAS | GARDEN CITY KANSAS | KANSAS STATE MEAN | BROOKINGS S. DAKOTA | PRESHO S. DAKOTA | SOUTH DAKOTA STATE MEAN |
|---------------------|---------------|------------------------|----------------|---------------------|--------------------------|----------------------|------------------------|---------------------|-------------------------------|
| TXGH13622 | 13 | 1945 | 2712 | 4675 | 3244 | 3544 | 1592 | 2460 | 2026 |
| TXGH105638 | 11 | 2106 | 2609 | 4104 | 3167 | 3294 | 1572 | 2154 | 1863 |
| AGC-112 | 32 | 2273 | 2284 | 3936 | 3199 | 3140 | 1698 | 2328 | 2013 |
| XHG-75 | 36 | 1804 | 2174 | 4202 | 3219 | 3199 | 2341 | 1911 | 2126 |
| TX84V1336 | 12 | 1607 | 2349 | 4236 | 2345 | 2977 | 1963 | 1725 | 1844 |
| XW161 | 35 | 2511 | 2419 | 4505 | 2399 | 3108 | 1807 | 1343 | 1575 |
| TX87HA1 | 45 | 2247 | 2383 | 4246 | 3042 | 3224 | 1874 | 1837 | 1855 |
| RL844677 | 30 | 1647 | 2421 | 4651 | 2795 | 3289 | 1690 | 1880 | 1785 |
| XH685 | 37 | 1496 | 2287 | 4637 | 2739 | 3221 | 1826 | 1569 | 1698 |
| OK86215 | 8 | 2130 | 2201 | 4391 | 2684 | 3092 | 1970 | 2082 | 2026 |
| TX84V1317 | 14 | 1508 | 2257 | 4601 | 2874 | 3244 | 1445 | 1677 | 1561 |
| IL80-1251 | 44 | 1559 | 2233 | 4155 | 2533 | 2974 | 1567 | 2003 | 1785 |
| OK84286 | 5 | 1727 | 2215 | 3451 | 2831 | 2832 | 1973 | 1794 | 1884 |
| NA-W83-256 | 41 | 1300 | 2291 | 4382 | 2802 | 3159 | 2662 | 2042 | 2352 |
| NE82656 | 29 | 1678 | 2042 | 4223 | 2639 | 2968 | 2179 | 1779 | 1979 |
| TX86A7041 | 17 | 604 | 1993 | 3991 | 2260 | 2748 | 1723 | 1510 | 1616 |
| TX81V6607-2 | 15 | 2499 | 2569 | 4123 | 3158 | 3283 | 2045 | 2074 | 2059 |
| NE83407 | 28 | 935 | 2336 | 3903 | 2556 | 2932 | 2238 | 1902 | 2070 |
| C0830027 | 21 | 1545 | 2327 | 3526 | 2840 | 2898 | 1794 | 1689 | 1741 |
| C0830034 | 22 | 1039 | 2517 | 3704 | 2860 | 3027 | 2313 | 1704 | 2009 |
| AGC-113 | 33 | 820 | 2083 | 4215 | 2766 | 3021 | 2157 | 1481 | 1819 |
| C117826 | 3 | 819 | 2235 | 3762 | 2621 | 2872 | 1692 | 1974 | 1833 |
| NA-W81-162-W | 42 | 1331 | 2118 | 4338 | 2397 | 2951 | 1863 | 2001 | 1932 |
| RL845472 | 31 | 1341 | 2215 | 3912 | 2677 | 2935 | 1608 | 1966 | 1787 |
| TX81V6582-2 | 10 | 2979 | 2641 | 4043 | 2813 | 3166 | 1813 | 1839 | 1826 |
| OK84287 | 6 | 1481 | 2132 | 3112 | 2706 | 2650 | 2199 | 1538 | 1869 |
| TX84V1736 | 16 | 1820 | 2067 | 3990 | 2596 | 2884 | 1345 | 1418 | 1382 |
| KS82C2338 | 25 | 2011 | 2186 | 3692 | 2977 | 2952 | 1657 | 1723 | 1690 |
| TX86V1110 | 19 | 1642 | 2076 | 3777 | 2641 | 2831 | 2093 | 1592 | 1843 |
| NE84557 | 27 | 1058 | 2038 | 3884 | 2455 | 2792 | 1902 | 2047 | 1975 |
| TX86V1109 | 18 | 1929 | 2266 | 3807 | 2820 | 2964 | 1600 | 1921 | 1760 |
| WH180001 | 39 | 1186 | 2154 | 4002 | 2280 | 2812 | 1555 | 1660 | 1608 |
| OK84343 | 4 | 1802 | 2547 | 3866 | 2385 | 2932 | 1267 | 1391 | 1329 |
| OK86197 | 7 | 2082 | 2009 | 3890 | 2659 | 2852 | 1813 | 1891 | 1852 |
| NA-W84-229 | 40 | 1186 | 2233 | 3958 | 2368 | 2853 | 1748 | 1636 | 1692 |
| IL83-7439 | 43 | 925 | 2107 | 3656 | 2453 | 2739 | 2130 | 1791 | 1961 |
| NE82533 | 26 | 704 | 2121 | 3840 | 2733 | 2898 | 1877 | 1899 | 1988 |
| TXGH10989 | 9 | 2003 | 2551 | 3822 | 2982 | 3118 | 1090 | 1610 | 1350 |
| Bounty-122 | 38 | 1232 | 2201 | 3006 | 2392 | 2533 | 1253 | 1402 | 1327 |
| XW141 | 34 | 1580 | 2022 | 4311 | 2498 | 2943 | 1042 | 1423 | 1232 |
| C113996 | 2 | 894 | 2047 | 3399 | 2554 | 2663 | 1691 | 2095 | 1893 |
| KS84HW196 | 24 | 1578 | 2401 | 3844 | 2529 | 2924 | 1484 | 1608 | 1546 |
| C0830014 | 23 | 1117 | 2340 | 3852 | 2477 | 2890 | 1186 | 1560 | 1373 |
| C082009 | 20 | 1208 | 1883 | 3144 | 2825 | 2617 | 1361 | 1614 | 1487 |
| C11442 | 1 | 510 | 1397 | 2792 | 1924 | 2038 | 1140 | 1361 | 1251 |
| MEAN | | 1542 | 2237 | 3945 | 2683 | 2955 | 1752 | 1776 | 1764 |
| LSD(.05) | | 445 | 429 | 566 | 377 | 423 | 548 | 443 | 525 |
| C.V. | | 17.7 | 11.7 | 8.8 | 8.6 | 9.6 | 19.2 | 15.3 | 17.3 |

* Not included in state or regional averages.

Table 2. Continued.

| C.I. OR SEL. NO. | ENTRY NO. | STILLWATER OKLAHOMA | ALTUS OKLAHOMA | LAHOMA OKLAHOMA | GOODWELL OKLAHOMA | OKLAHOMA STATE MEAN | COLUMBIA MISSOURI | URBANA ILLINOIS | | | | | | | |
|---------------------|--------------|------------------------|-------------------|--------------------|----------------------|------------------------|----------------------|--------------------|----|------|----|------|----|------|----|
| TXGH13622 | 13 | 3540 | 21 | 3019 | 37 | 3961 | 35 | 3684 | 38 | 3551 | 33 | 6424 | 1 | 4881 | 2 |
| TXGH10563B | 11 | 3258 | 29 | 3137 | 31 | 4218 | 27 | 4413 | 9 | 3757 | 24 | 5259 | 28 | 4801 | 3 |
| AGC-112 | 32 | 2787 | 39 | 3277 | 21 | 4324 | 24 | 4207 | 16 | 3649 | 31 | 6020 | 6 | 4525 | 10 |
| XH675 | 36 | 3691 | 16 | 3371 | 15 | 4363 | 23 | 4292 | 14 | 3929 | 16 | 6413 | 2 | 4228 | 26 |
| TX84V1336 | 12 | 3752 | 13 | 3501 | 7 | 5217 | 3 | 4346 | 13 | 4204 | 5 | 5459 | 23 | 4350 | 21 |
| XW161 | 35 | 3814 | 9 | 4049 | 2 | 5482 | 1 | 4805 | 2 | 4538 | 2 | 5538 | 20 | 4518 | 11 |
| TX87HA1 | 45 | 3427 | 24 | 3270 | 22 | 4177 | 30 | 4135 | 19 | 3752 | 25 | 6133 | 3 | 5070 | 1 |
| RL844677 | 30 | 3960 | 5 | 3378 | 14 | 4763 | 11 | 3913 | 30 | 4003 | 12 | 5810 | 15 | 4591 | 9 |
| XH685 | 37 | 3744 | 14 | 3547 | 4 | 4899 | 8 | 4092 | 23 | 4071 | 10 | 5935 | 8 | 3991 | 31 |
| OK86215 | 8 | 3730 | 15 | 3100 | 33 | 4987 | 6 | 4785 | 3 | 4151 | 7 | 6056 | 4 | 4795 | 4 |
| TX84V1317 | 14 | 4001 | 3 | 3488 | 10 | 5064 | 5 | 4441 | 8 | 4249 | 4 | 5914 | 9 | 4254 | 25 |
| IL80-1251 | 44 | 3574 | 19 | 3189 | 27 | 4374 | 22 | 4176 | 17 | 3828 | 18 | 5570 | 19 | 4488 | 13 |
| OK84286 | 5 | 3843 | 8 | 3326 | 17 | 4743 | 13 | 5098 | 1 | 4252 | 3 | 5894 | 12 | 4695 | 7 |
| NA-W83-256 | 41 | 3029 | 37 | 3296 | 18 | 4143 | 32 | 4354 | 12 | 3705 | 27 | 5443 | 24 | 4453 | 16 |
| NE82656 | 29 | 3251 | 30 | 3415 | 13 | 4318 | 25 | 4113 | 22 | 3774 | 22 | 5149 | 35 | 4044 | 29 |
| TX86A7041 | 17 | 3608 | 17 | 3432 | 12 | 4813 | 10 | 4134 | 20 | 3997 | 13 | 5252 | 29 | 3847 | 34 |
| TX81V6607-2 | 15 | 4089 | 1 | 3158 | 29 | 5115 | 4 | 4176 | 17 | 4134 | 8 | 5689 | 16 | 1128 | 45 |
| NE83407 | 28 | 3497 | 23 | 3444 | 11 | 4195 | 28 | 3953 | 27 | 3772 | 23 | 5439 | 25 | 4700 | 6 |
| C0830027 | 21 | 3571 | 20 | 2798 | 42 | 4526 | 19 | 3790 | 36 | 3671 | 30 | 5276 | 26 | 3860 | 33 |
| C0830034 | 22 | 3861 | 7 | 2820 | 41 | 3784 | 39 | 3392 | 44 | 3464 | 38 | 5249 | 30 | 4354 | 20 |
| AGC-113 | 33 | 3768 | 12 | 3096 | 34 | 3474 | 42 | 3808 | 34 | 3536 | 34 | 5245 | 32 | 4403 | 18 |
| C117826 | 3 | 2937 | 38 | 2897 | 39 | 3816 | 38 | 3436 | 43 | 3272 | 40 | 4923 | 39 | 4472 | 15 |
| NA-W81-162-W | 42 | 3336 | 26 | 3536 | 5 | 4729 | 15 | 4263 | 15 | 3966 | 15 | 5861 | 13 | 3963 | 32 |
| RL845472 | 31 | 2651 | 41 | 3235 | 25 | 4286 | 26 | 4362 | 11 | 3633 | 32 | 5810 | 14 | 4007 | 30 |
| TX81V6582-2 | 10 | 3587 | 18 | 3160 | 28 | 4760 | 12 | 4657 | 7 | 4041 | 11 | 5993 | 7 | 1953 | 44 |
| OK84287 | 6 | 3976 | 4 | 3363 | 16 | 4704 | 16 | 4708 | 4 | 4188 | 6 | 5636 | 17 | 4515 | 12 |
| TX84V1736 | 16 | 3780 | 11 | 3259 | 24 | 4946 | 7 | 4403 | 10 | 4097 | 9 | 5205 | 33 | 4361 | 19 |
| KS82C2338 | 25 | 3316 | 27 | 3106 | 32 | 4659 | 17 | 4091 | 24 | 3793 | 21 | 5517 | 21 | 4169 | 27 |
| TX86V1110 | 19 | 3036 | 36 | 3508 | 6 | 4740 | 14 | 3952 | 28 | 3809 | 20 | 5026 | 37 | 4707 | 5 |
| NE84557 | 27 | 3289 | 28 | 3020 | 36 | 3927 | 37 | 3887 | 31 | 3531 | 36 | 5270 | 27 | 4318 | 23 |
| TX86V1109 | 18 | 3058 | 35 | 3497 | 9 | 4388 | 21 | 3873 | 32 | 3704 | 28 | 5500 | 22 | 4641 | 8 |
| WH180001 | 39 | 3784 | 10 | 3564 | 3 | 4578 | 18 | 4013 | 26 | 3985 | 14 | 6054 | 5 | 3426 | 38 |
| OK84343 | 4 | 4083 | 2 | 4086 | 1 | 5351 | 2 | 4664 | 6 | 4546 | 1 | 5181 | 34 | 4291 | 24 |
| OK86197 | 7 | 3510 | 22 | 3143 | 30 | 4064 | 34 | 4122 | 21 | 3709 | 26 | 5578 | 18 | 4149 | 28 |
| NA-W84-229 | 40 | 3208 | 31 | 3289 | 20 | 4847 | 9 | 3922 | 29 | 3817 | 19 | 4777 | 41 | 2837 | 41 |
| IL83-7439 | 43 | 3124 | 33 | 3222 | 26 | 3617 | 40 | 3697 | 37 | 3415 | 39 | 5906 | 11 | 4476 | 14 |
| NE82533 | 26 | 2231 | 43 | 2554 | 43 | 3314 | 44 | 3593 | 39 | 2923 | 44 | 4960 | 38 | 4348 | 22 |
| TXGH10989 | 9 | 3868 | 6 | 3266 | 23 | 4478 | 20 | 4020 | 25 | 3908 | 17 | 5910 | 10 | 2598 | 43 |
| 8ounty-122 | 38 | 3423 | 25 | 3290 | 19 | 4186 | 29 | 3864 | 33 | 3691 | 29 | 5026 | 36 | 3108 | 40 |
| XW141 | 34 | 1766 | 45 | 3501 | 8 | 4166 | 31 | 4699 | 5 | 3533 | 35 | 4839 | 40 | 3691 | 35 |
| C113996 | 2 | 2692 | 40 | 2842 | 40 | 3458 | 43 | 3575 | 40 | 3141 | 43 | 4271 | 43 | 3553 | 37 |
| KS84HW196 | 24 | 3199 | 32 | 3081 | 35 | 3956 | 36 | 3802 | 35 | 3509 | 37 | 5247 | 31 | 4436 | 17 |
| C0830014 | 23 | 2475 | 42 | 2973 | 38 | 4080 | 33 | 3553 | 41 | 3270 | 41 | 4770 | 42 | 3663 | 36 |
| C082009 | 20 | 3070 | 34 | 2472 | 44 | 3560 | 41 | 3504 | 42 | 3152 | 42 | 4049 | 44 | 3335 | 39 |
| C11442 | 1 | 1779 | 44 | 1680 | 45 | 1770 | 45 | 2592 | 45 | 1955 | 45 | 3917 | 45 | 2626 | 42 |

Table 2. Concluded.

| C.I. OR SEL. NO. | ENTRY: NO. | CLOVIS (IRR.) | CLOVIS (DRYL.)* | NEW MEXICO | FARMINGTON NEW MEXICO | NEW MEXICO STATE MEAN | AMES IOWA | ABERDEEN IDAHO | LIND WASHINGTON | REGIONAL AVERAGE |
|---------------------|---------------|------------------|--------------------|------------|--------------------------|--------------------------|--------------|-------------------|--------------------|---------------------|
| TXGH13622 | 13 | 7176 | 2922 | 3 | 5630 | 6403 | 3847 | 5333 | 1744 | 3798 |
| TXGH105638 | 11 | 7081 | 3257 | 1 | 6334 | 6708 | 2975 | 6143 | 1679 | 3757 |
| AGC-112 | 32 | 6835 | 2044 | 11 | 5821 | 6328 | 4013 | 4973 | 1941 | 3730 |
| XH675 | 36 | 5940 | 2456 | 6 | 6950 | 6445 | 3250 | 4751 | 1740 | 3667 |
| TX84V1336 | 12 | 5617 | 2069 | 10 | 6569 | 6093 | 2627 | 6427 | 1997 | 3662 |
| XW161 | 35 | 5691 | 678 | 45 | 5630 | 5630 | 3488 | 5130 | 1688 | 3657 |
| TX87HA1 | 45 | 5331 | 2970 | 2 | 5381 | 5356 | 4344 | 4886 | 1314 | 3649 |
| RL84A4677 | 30 | 5880 | 1342 | 33 | 6833 | 6357 | 3203 | 4468 | 2145 | 3639 |
| XH685 | 37 | 5042 | 1483 | 28 | 7141 | 6092 | 3163 | 4683 | 1975 | 3598 |
| TX86215 | 8 | 5483 | 1677 | 20 | 5117 | 5300 | 3401 | 4938 | 1482 | 3590 |
| TX84V1317 | 14 | 5739 | 2033 | 12 | 6217 | 5978 | 1867 | 5376 | 1403 | 3587 |
| IL80-1251 | 44 | 5095 | 1994 | 13 | 6070 | 5582 | 4295 | 5043 | 1436 | 3507 |
| OK84286 | 5 | 6326 | 1743 | 17 | 5117 | 5722 | 3331 | 4446 | 1374 | 3505 |
| NA-W83-256 | 41 | 5323 | 1578 | 24 | 5909 | 5616 | 3022 | 5177 | 1632 | 3494 |
| NE82656 | 29 | 4722 | 973 | 40 | 5806 | 5264 | 4351 | 4367 | 1679 | 3449 |
| TX86A7041 | 17 | 4407 | 1728 | 18 | 8006 | 6207 | 3414 | 4791 | 1957 | 3443 |
| TX81V6607-2 | 15 | 4870 | 1980 | 14 | 6305 | 5587 | 195 | 5499 | 1547 | 3434 |
| NE83407 | 28 | 4432 | 974 | 39 | 5073 | 6753 | 4154 | 4940 | 1439 | 3425 |
| C0830027 | 21 | 5841 | 1521 | 27 | 6789 | 6315 | 2047 | 5314 | 1558 | 3424 |
| C0830034 | 22 | 5236 | 1384 | 31 | 6745 | 5990 | 2878 | 5782 | 1984 | 3420 |
| AGC-113 | 33 | 3985 | 868 | 42 | 7038 | 5512 | 4235 | 5865 | 1690 | 3420 |
| C117826 | 3 | 6348 | 2666 | 4 | 6349 | 6348 | 3475 | 5515 | 1887 | 3417 |
| NA-W81-162-W | 42 | 5098 | 1346 | 32 | 5586 | 5342 | 2365 | 4851 | 1365 | 3408 |
| RL845472 | 31 | 4122 | 2338 | 7 | 5015 | 4568 | 3766 | 4607 | 1946 | 3405 |
| TX81V6582-2 | 10 | 4506 | 1579 | 23 | 5938 | 5222 | 726 | 4744 | 1584 | 3365 |
| OK84287 | 6 | 5858 | 2265 | 8 | 5249 | 5554 | 3134 | 4503 | 1085 | 3361 |
| TX84V1736 | 16 | 5139 | 1700 | 19 | 5059 | 5099 | 3170 | 4534 | 1907 | 3355 |
| K582C2338 | 25 | 5248 | 1110 | 38 | 5147 | 5197 | 2183 | 4585 | 1592 | 3354 |
| TX86V1110 | 19 | 5442 | 1538 | 25 | 5147 | 5294 | 4080 | 4954 | 1325 | 3349 |
| NE84557 | 27 | 5536 | 1414 | 30 | 5440 | 5488 | 2921 | 4575 | 2049 | 3346 |
| TX86V1109 | 18 | 4585 | 1601 | 22 | 5191 | 4888 | 3688 | 4887 | 1592 | 3342 |
| WH180001 | 39 | 5640 | 1531 | 26 | 5938 | 5789 | 1219 | 5210 | 1997 | 3336 |
| OK84343 | 4 | 5625 | 1629 | 21 | 5088 | 5356 | 460 | 4431 | 1341 | 3300 |
| OK86197 | 7 | 5471 | 1198 | 34 | 4560 | 5015 | 2851 | 3782 | 1121 | 3278 |
| NA-W84-229 | 40 | 5389 | 1113 | 37 | 6965 | 6177 | 1029 | 5214 | 2069 | 3268 |
| IL83-7439 | 43 | 3765 | 871 | 41 | 5220 | 4492 | 3878 | 4771 | 1630 | 3210 |
| NE82533 | 26 | 4756 | 831 | 43 | 5718 | 5237 | 3528 | 4739 | 1901 | 3187 |
| TXGH10989 | 9 | 5762 | 2170 | 9 | 5000 | 5381 | 448 | 4831 | 1309 | 3181 |
| Bounty-122 | 38 | 5419 | 1146 | 35 | 6056 | 5737 | 1825 | 4994 | 1547 | 3134 |
| XW141 | 34 | 4387 | 697 | 44 | 6510 | 5448 | 2365 | 4970 | 1298 | 3074 |
| C113996 | 2 | 4907 | 2567 | 5 | 4311 | 4609 | 3753 | 4393 | 1825 | 3044 |
| KS84HW196 | 24 | 3911 | 1455 | 29 | 3739 | 3825 | 1401 | 3323 | 1567 | 2984 |
| C0830014 | 23 | 5420 | 1945 | 15 | 4795 | 5107 | 1078 | 4411 | 1820 | 2973 |
| C082009 | 20 | 3775 | 1849 | 16 | 6334 | 5054 | 2136 | 5135 | 1881 | 2905 |
| C11442 | 1 | 3833 | 1126 | 36 | 5322 | 4578 | 2948 | 3894 | 1437 | 2270 |
| MEAN | | 5244 | 1675 | | 5781 | 5513 | 2812 | 4893 | 1655 | 3371 |
| LSD(.05) | | 1202 | 987 | | 1255 | N.S. | 1087 | 1112 | 304 | 274 |
| C.V. | | 14.0 | 36.1 | | 15.5 | 15.1 | 23.7 | 13.9 | 11.2 | 12.8 |

* Not included in state or regional averages.

Table 3. Summary of mean yields (kg/ha) and ranks of 45 wheats grown in the 1988 Southern Regional Performance Nursery at 15 locations from the Midwest from which a CV of 14 or less and a significant F test for entries were obtained.

| C.I. OR SEL. NO. | ENTRY: NO. | STILLWATER: OKLAHOMA | ALTUS: OKLAHOMA | LAHOMA: OKLAHOMA | GOODWELL: OKLAHOMA | DALLAS: TEXAS | CHILLI- COTHE: TEXAS | BUSHLAND: (IRR.) TEXAS | BUSHLAND: (DRYL.) TEXAS |
|---------------------|---------------|-------------------------|--------------------|---------------------|-----------------------|------------------|----------------------------|------------------------------|-------------------------------|
| TXGH105638 | 11 | 3258 | 3137 | 4218 | 4413 | 3630 | 4492 | 5502 | 3039 |
| XW161 | 35 | 3814 | 4049 | 5482 | 4805 | 3984 | 4723 | 5360 | 1950 |
| TXGH13622 | 13 | 3540 | 3019 | 3961 | 3684 | 3973 | 4580 | 5102 | 3160 |
| TX81V6607-2 | 15 | 4089 | 3158 | 5115 | 4176 | 3560 | 4741 | 6226 | 3685 |
| TX84V1317 | 14 | 4001 | 3488 | 5064 | 4441 | 3474 | 4389 | 5107 | 2977 |
| TX84V1336 | 12 | 3752 | 3501 | 5217 | 4346 | 3933 | 4311 | 5661 | 3157 |
| AGC-112 | 32 | 2787 | 3277 | 4324 | 4207 | 3395 | 4060 | 5142 | 3014 |
| TX81V6582-2 | 10 | 3587 | 3160 | 4760 | 4657 | 3115 | 4311 | 5984 | 3373 |
| OK86215 | 8 | 3730 | 3100 | 4987 | 4785 | 3907 | 4046 | 4878 | 2672 |
| TX87HA1 | 45 | 3427 | 3270 | 4177 | 4135 | 3702 | 4557 | 5273 | 2825 |
| XH675 | 36 | 3691 | 3371 | 4363 | 4292 | 4222 | 4084 | 4922 | 2650 |
| RL844677 | 30 | 3960 | 3378 | 4763 | 3913 | 3770 | 4730 | 4009 | 2449 |
| XH685 | 37 | 3744 | 3547 | 4899 | 4092 | 3924 | 4069 | 4649 | 2637 |
| OK84286 | 5 | 3843 | 3326 | 4743 | 5098 | 3714 | 3974 | 4887 | 2825 |
| OK84343 | 4 | 4083 | 4086 | 5351 | 4664 | 3409 | 4013 | 4974 | 2260 |
| C0830027 | 21 | 3571 | 2798 | 4526 | 3790 | 3775 | 4656 | 4779 | 2839 |
| TXGH10989 | 9 | 3868 | 3266 | 4478 | 4020 | 3471 | 4147 | 4757 | 2861 |
| NA-W81-162-W | 42 | 3336 | 3536 | 4729 | 4263 | 3791 | 4542 | 4487 | 2329 |
| TX84V1736 | 16 | 3780 | 3259 | 4946 | 4403 | 4081 | 4165 | 5183 | 2740 |
| OK84287 | 6 | 3976 | 3363 | 4704 | 4708 | 3420 | 3797 | 4711 | 2677 |
| NA-W83-256 | 41 | 3029 | 3296 | 4143 | 4354 | 4094 | 4066 | 4220 | 2369 |
| IL80-1251 | 44 | 3574 | 3189 | 4374 | 4176 | 3136 | 4270 | 4400 | 2349 |
| WH180001 | 39 | 3784 | 3564 | 4578 | 4013 | 3113 | 4122 | 4407 | 2031 |
| KS82C2338 | 25 | 3316 | 3106 | 4659 | 4091 | 3298 | 4075 | 4694 | 2361 |
| TX86A7041 | 17 | 3608 | 3432 | 4813 | 4134 | 4192 | 4152 | 4142 | 2319 |
| OK86197 | 7 | 3510 | 3143 | 4064 | 4122 | 3905 | 3670 | 4341 | 2460 |
| NA-W84-229 | 40 | 3208 | 3289 | 4847 | 3922 | 3170 | 4001 | 4781 | 1927 |
| TX86V1110 | 19 | 3036 | 3508 | 4740 | 3952 | 3303 | 4398 | 4048 | 2326 |
| TX86V1109 | 18 | 3058 | 3497 | 4388 | 3873 | 3757 | 4131 | 4072 | 2063 |
| RL845472 | 31 | 2651 | 3235 | 4286 | 4362 | 3297 | 4176 | 4297 | 2570 |
| NE83407 | 28 | 3497 | 3444 | 4195 | 3953 | 3396 | 4317 | 4014 | 2043 |
| NE82656 | 29 | 3251 | 3415 | 4318 | 4113 | 3354 | 4176 | 4036 | 1589 |
| C0830034 | 22 | 3861 | 2820 | 3784 | 3392 | 3326 | 4140 | 3902 | 2857 |
| C117826 | 3 | 2937 | 2897 | 3816 | 3436 | 2770 | 3171 | 4097 | 2835 |
| NE84557 | 27 | 3289 | 3020 | 3927 | 3887 | 3177 | 4235 | 3249 | 2402 |
| AGC-113 | 33 | 3768 | 3096 | 3474 | 3808 | 3494 | 4096 | 2966 | 2435 |
| Bounty-122 | 38 | 3423 | 3290 | 4186 | 3864 | 4190 | 4122 | 4642 | 1972 |
| KS84HW196 | 24 | 3199 | 3081 | 3956 | 3802 | 3171 | 3237 | 4389 | 2321 |
| C0830014 | 23 | 2475 | 2973 | 4080 | 3553 | 3465 | 4506 | 3210 | 1949 |
| XW141 | 34 | 1766 | 3501 | 4166 | 4699 | 2699 | 4201 | 4344 | 1875 |
| IL83-7439 | 43 | 3124 | 3222 | 3617 | 3697 | 3078 | 3757 | 3823 | 1541 |
| NE82533 | 26 | 2231 | 2554 | 3314 | 3593 | 3294 | 4120 | 3045 | 1841 |
| C113996 | 2 | 2692 | 2842 | 3458 | 3575 | 2910 | 3762 | 2870 | 1987 |
| C082009 | 20 | 3070 | 2472 | 3560 | 3504 | 2565 | 3654 | 3152 | 2114 |
| C11442 | 1 | 1779 | 1680 | 1770 | 2592 | 1343 | 2849 | 1734 | 1017 |
| MEAN | | 3355 | 3215 | 4340 | 4075 | 3461 | 4141 | 4410 | 2437 |
| LSD(.05) | | 359 | 375 | 364 | 555 | 442 | 532 | 500 | 475 |
| C.V. | | 6.5 | 7.1 | 5.1 | 8.3 | 7.8 | 7.9 | 6.9 | 13.9 |

Table 3. Concluded.

| C.I. OR SEL. NO. | ENTRY: NO. | LINCOLN NEBRASKA | ALLIANCE NEBRASKA | HAYS KANSAS | MANHATTAN KANSAS | GARDEN CITY KANSAS | BURLINGTON COLORADO | CLOVIS (IRR.) NEW MEXICO | REGIONAL AVERAGE | | | | | | | | |
|---------------------|---------------|---------------------|----------------------|----------------|---------------------|--------------------------|------------------------|--------------------------------|---------------------|------|----|------|----|------|----|------|----|
| TXGH105638 | 11 | 4589 | 5 | 4735 | 6 | 2609 | 3 | 4104 | 17 | 3167 | 4 | 2817 | 12 | 7081 | 2 | 4053 | 1 |
| XW161 | 35 | 4600 | 4 | 4337 | 22 | 2419 | 9 | 4505 | 5 | 2399 | 37 | 2647 | 23 | 5691 | 12 | 4051 | 2 |
| TXGH13622 | 13 | 4721 | 2 | 4457 | 15 | 2712 | 1 | 4675 | 1 | 3244 | 1 | 2715 | 17 | 7176 | 1 | 4048 | 3 |
| TX81V6607-2 | 15 | 4178 | 21 | 3891 | 41 | 2569 | 4 | 4123 | 16 | 3158 | 5 | 2669 | 21 | 4870 | 32 | 4014 | 4 |
| TX84V1317 | 14 | 4470 | 8 | 4500 | 14 | 2257 | 20 | 4601 | 4 | 2874 | 9 | 2693 | 19 | 5739 | 11 | 4005 | 5 |
| TX84V1336 | 12 | 4060 | 25 | 3944 | 39 | 2349 | 12 | 4236 | 11 | 2345 | 42 | 3122 | 2 | 5617 | 15 | 3970 | 6 |
| AGC-112 | 32 | 4779 | 1 | 4799 | 2 | 2284 | 18 | 3936 | 23 | 3199 | 3 | 3175 | 1 | 6835 | 3 | 3948 | 7 |
| TX81V6582-2 | 10 | 4351 | 15 | 4616 | 10 | 2641 | 2 | 4043 | 18 | 2813 | 15 | 2784 | 14 | 4506 | 36 | 3913 | 8 |
| OK86215 | 8 | 4434 | 9 | 4376 | 19 | 2201 | 26 | 4391 | 6 | 2684 | 22 | 2932 | 6 | 5483 | 17 | 3907 | 9 |
| TX87HA1 | 45 | 4562 | 6 | 4623 | 9 | 2383 | 11 | 4246 | 10 | 3042 | 6 | 2851 | 8 | 5331 | 23 | 3894 | 10 |
| XH675 | 36 | 4154 | 22 | 4690 | 7 | 2174 | 29 | 4202 | 14 | 3219 | 2 | 2309 | 39 | 5940 | 6 | 3886 | 11 |
| RL844677 | 30 | 4636 | 3 | 4167 | 31 | 2421 | 8 | 4651 | 2 | 2795 | 17 | 2748 | 16 | 5880 | 7 | 3885 | 12 |
| XH685 | 37 | 4329 | 16 | 4778 | 4 | 2287 | 17 | 4637 | 3 | 2739 | 19 | 2819 | 11 | 5042 | 30 | 3879 | 13 |
| OK84286 | 5 | 3905 | 27 | 4181 | 30 | 2215 | 24 | 3451 | 40 | 2831 | 12 | 2764 | 15 | 6326 | 5 | 3872 | 14 |
| OK84343 | 4 | 3849 | 29 | 3862 | 42 | 2547 | 6 | 3866 | 28 | 2385 | 40 | 2873 | 7 | 5625 | 14 | 3856 | 15 |
| C0830027 | 21 | 4109 | 24 | 4163 | 32 | 2327 | 15 | 3526 | 39 | 2840 | 11 | 2786 | 13 | 5841 | 9 | 3755 | 16 |
| TXGH10989 | 9 | 3806 | 33 | 3893 | 40 | 2551 | 5 | 3822 | 32 | 2982 | 7 | 2629 | 26 | 5762 | 10 | 3754 | 17 |
| NA-W81-162-W | 42 | 4380 | 12 | 4380 | 18 | 2118 | 33 | 4338 | 8 | 2397 | 38 | 2363 | 38 | 5098 | 28 | 3739 | 18 |
| TX84V1736 | 16 | 3174 | 43 | 4780 | 3 | 2067 | 37 | 3990 | 21 | 2596 | 28 | 1696 | 45 | 5139 | 27 | 3733 | 19 |
| OK84287 | 6 | 3824 | 32 | 3750 | 43 | 2132 | 31 | 3112 | 43 | 2706 | 21 | 2841 | 9 | 5858 | 8 | 3705 | 20 |
| NA-W83-256 | 41 | 3838 | 30 | 4443 | 16 | 2291 | 16 | 4382 | 7 | 2802 | 16 | 2526 | 31 | 5323 | 24 | 3678 | 21 |
| IL80-1251 | 44 | 4369 | 13 | 4606 | 11 | 2233 | 23 | 4155 | 15 | 2533 | 31 | 2698 | 18 | 5095 | 29 | 3677 | 22 |
| WH180001 | 39 | 3679 | 36 | 4764 | 5 | 2154 | 30 | 4002 | 19 | 2280 | 43 | 2621 | 27 | 5640 | 13 | 3650 | 23 |
| KS82C2338 | 25 | 3672 | 37 | 4369 | 21 | 2186 | 28 | 3692 | 37 | 2977 | 8 | 2964 | 5 | 5248 | 25 | 3647 | 24 |
| TX86A7041 | 17 | 4228 | 20 | 4335 | 23 | 1993 | 43 | 3991 | 20 | 2260 | 44 | 2371 | 37 | 4407 | 38 | 3625 | 25 |
| OK86197 | 7 | 4232 | 19 | 4182 | 29 | 2009 | 42 | 3890 | 26 | 2659 | 24 | 2619 | 28 | 5471 | 18 | 3618 | 26 |
| NA-W84-229 | 40 | 3880 | 28 | 4327 | 24 | 2233 | 22 | 3958 | 22 | 2368 | 41 | 2649 | 22 | 5389 | 22 | 3597 | 27 |
| TX86V1110 | 19 | 3708 | 35 | 4314 | 25 | 2076 | 36 | 3777 | 34 | 2641 | 25 | 2635 | 24 | 5442 | 19 | 3593 | 28 |
| TX86V1109 | 18 | 4389 | 11 | 4261 | 26 | 2266 | 19 | 3807 | 33 | 2820 | 14 | 2577 | 29 | 4585 | 35 | 3570 | 29 |
| RL845472 | 31 | 4152 | 23 | 4427 | 17 | 2215 | 25 | 3912 | 24 | 2677 | 23 | 2968 | 4 | 4122 | 40 | 3556 | 30 |
| NE83407 | 28 | 4006 | 26 | 4555 | 12 | 2336 | 14 | 3903 | 25 | 2556 | 29 | 2451 | 33 | 4432 | 37 | 3540 | 31 |
| NE82656 | 29 | 3835 | 31 | 4552 | 13 | 2042 | 39 | 4223 | 12 | 2639 | 26 | 2820 | 10 | 4722 | 34 | 3539 | 32 |
| C0830034 | 22 | 4414 | 10 | 4162 | 33 | 2517 | 7 | 3704 | 36 | 2860 | 10 | 2001 | 41 | 5236 | 26 | 3532 | 33 |
| C117826 | 3 | 4295 | 18 | 4666 | 8 | 2235 | 21 | 3762 | 35 | 2621 | 27 | 2396 | 35 | 6348 | 4 | 3522 | 34 |
| NE84557 | 27 | 4360 | 14 | 4086 | 37 | 2038 | 40 | 3884 | 27 | 2455 | 35 | 2550 | 30 | 5536 | 16 | 3473 | 35 |
| AGC-113 | 33 | 4472 | 7 | 4925 | 1 | 2083 | 35 | 4215 | 13 | 2766 | 18 | 2488 | 32 | 3985 | 41 | 3471 | 36 |
| 8ounty-122 | 38 | 3212 | 42 | 4224 | 27 | 2201 | 26 | 3006 | 44 | 2392 | 39 | 1873 | 43 | 5419 | 21 | 3468 | 37 |
| KS84HW196 | 24 | 3665 | 38 | 4145 | 34 | 2401 | 10 | 3844 | 30 | 2529 | 32 | 3025 | 3 | 3911 | 42 | 3378 | 38 |
| C0830014 | 23 | 3549 | 39 | 3452 | 44 | 2340 | 13 | 3852 | 29 | 2477 | 34 | 2378 | 36 | 5420 | 20 | 3312 | 39 |
| XW141 | 34 | 3120 | 44 | 4216 | 28 | 2022 | 41 | 4311 | 9 | 2498 | 33 | 1821 | 44 | 4387 | 39 | 3308 | 40 |
| IL83-7439 | 43 | 4320 | 17 | 4096 | 35 | 2107 | 34 | 3656 | 38 | 2453 | 36 | 2427 | 34 | 3765 | 45 | 3245 | 41 |
| NE82533 | 26 | 3490 | 40 | 4374 | 20 | 2121 | 32 | 3840 | 31 | 2733 | 20 | 2686 | 20 | 4756 | 33 | 3199 | 42 |
| C113996 | 2 | 3719 | 34 | 4091 | 36 | 2047 | 38 | 3389 | 41 | 2554 | 30 | 2630 | 25 | 4907 | 31 | 3162 | 43 |
| C082009 | 20 | 3217 | 41 | 4015 | 38 | 1883 | 44 | 3144 | 42 | 2825 | 13 | 2230 | 40 | 3775 | 44 | 3012 | 44 |
| C11442 | 1 | 2923 | 45 | 3041 | 45 | 1397 | 45 | 2792 | 45 | 1924 | 45 | 1888 | 42 | 3833 | 43 | 2171 | 45 |
| MEAN | | 4037 | | 4301 | | 2237 | | 3945 | | 2683 | | 2589 | | 5244 | | 3631 | |
| LSD(.05) | | 614 | | 482 | | 429 | | 566 | | 377 | | 585 | | 1202 | | 289 | |
| C.V. | | 9.3 | | 6.9 | | 11.7 | | 8.8 | | 8.6 | | 13.8 | | 14.0 | | 9.6 | |

Table 4. Summary of mean yields (kg/ha) and ranks for 19 wheats grown in the Southern Regional Performance Nursery at 24 sites in 1987 and 1988 with state means and ranks.

| VARIETY OR PEDIGREE | : : C.I. OR : SEL. NO. | : : ENTRY: : NO. | : : DALLAS : TEXAS | : : CHILLI- : COTHE : TEXAS | : : BUSHLAND : (IRR.) : TEXAS | : : BUSHLAND : (DRYL.) : TEXAS | : : TEXAS : STATE MEAN |
|--|------------------------------|------------------------|--------------------------|--------------------------------------|--|---|------------------------------|
| TAM-105*4/Amigo*4//Largo | TXGH10563B | 11 | 3742 9 | 3366 4 | 4988 4 | 3384 5 | 3870 5 |
| TX71A562-6*4/Amigo*4//Largo | TXGH13622 | 13 | 3802 7 | 3412 3 | 4759 7 | 3410 4 | 3846 6 |
| TX71A374-4/TX71A1039-V1 | TX84V1317 | 14 | 3806 6 | 3440 2 | 4934 5 | 3452 3 | 3908 4 |
| Sturdy*3/Amigo | TX81V6582-2 | 10 | 3744 8 | 3265 5 | 5277 2 | 3554 2 | 3960 2 |
| TX71A1039-V1*3/Amigo | TX81V6607-2 | 15 | 4086 2 | 3482 1 | 5502 1 | 3775 1 | 4211 1 |
| TAM-105 | CI17826 | 3 | 2981 15 | 2846 15 | 4062 13 | 3110 9 | 3250 14 |
| KS73146/TX71A1039 | TX84V1336 | 12 | 3999 3 | 3183 7 | 5128 3 | 3376 6 | 3922 3 |
| Aurora/2*TAM W-101 | OK84343 | 4 | 3831 5 | 3097 8 | 4806 6 | 2890 11 | 3656 8 |
| 74cb462/Trapper//Vona | C0830027 | 21 | 3590 10 | 3221 6 | 4727 8 | 3342 7 | 3720 7 |
| C05926//7C/Tobari 63/3/Baca | C0830034 | 22 | 3387 11 | 3050 10 | 3803 15 | 3046 10 | 3321 12 |
| Bounty Hybrid Wheat | Bounty-122 | 38 | 4247 1 | 2992 12 | 4421 11 | 2751 14 | 3603 10 |
| Bulk Selection | KS82C2338 | 25 | 3226 13 | 3081 9 | 4482 10 | 2884 12 | 3418 11 |
| Bezostaya/TAM W-101//W558 | XW141 | 34 | 2307 18 | 2980 13 | 3966 14 | 2564 16 | 2954 16 |
| KS73167/Agate//Sage sib | NE82533 | 26 | 3219 14 | 2892 14 | 3517 16 | 2444 17 | 3018 15 |
| TAM W-101*4/Amigo*4//Largo | TXGH10989 | 9 | 3852 4 | 3005 11 | 4483 9 | 3154 8 | 3624 9 |
| Bsn/StrIng//3*Sut/3/Eag/4/Pinnacle/2*Eag | KS84HW196 | 24 | 3263 12 | 2771 16 | 4217 12 | 2836 13 | 3272 13 |
| Scout 66 | CI13996 | 2 | 2766 16 | 2647 18 | 2990 18 | 2655 15 | 2765 17 |
| 74F878/Wings//Vona | C082009 | 20 | 2752 17 | 2651 17 | 3212 17 | 2396 18 | 2753 18 |
| Kharkof | CI1442 | 1 | 1550 19 | 1923 19 | 1736 19 | 1888 19 | 1774 19 |
| MEAN | 3376 | 3016 | 4264 | 2995 | 3413 | | |
| LSD(.05) | 781 | 593 | 864 | 670 | 480 | | |
| C.V. | 7.1 | 7.7 | 8.4 | 10.0 | 8.5 | | |

Table 4. Continued.

| C.I. OR SEL. NO. | : : ENTRY: : NO. : | LINCOLN : NEBRASKA : | CLAY : CENTER : NEBRASKA : | ALLIANCE : NEBRASKA : | NEBRASKA : STATE MEAN : | NEBRASKA : (IRR.) : | CLOVIS : (DRYL.)* : | FARMINGTON : NEW MEXICO : | NEW MEXICO : STATE MEAN : |
|---------------------|--------------------------|-------------------------|----------------------------------|--------------------------|----------------------------|------------------------|------------------------|------------------------------|------------------------------|
| TXGH105638 | 11 | 3608 4 | 3252 3 | 4933 1 | 3931 2 | 6261 2 | 4224 1 | 6276 10 | 6268 4 |
| TXGH13622 | 13 | 3647 2 | 3149 4 | 4568 5 | 3788 4 | 6540 1 | 3915 2 | 6130 11 | 6335 3 |
| TX84V1317 | 14 | 3842 1 | 3518 1 | 4749 4 | 4036 1 | 5827 6 | 2783 8 | 6482 7 | 6154 5 |
| TX81V6582-2 | 10 | 3367 8 | 2835 10 | 4815 3 | 3672 6 | 4673 17 | 2327 17 | 6626 5 | 5649 11 |
| TX81V6607-2 | 15 | 3144 13 | 2939 8 | 4417 9 | 3500 8 | 5177 12 | 2579 14 | 6095 12 | 5636 12 |
| CI17826 | 3 | 3517 6 | 3090 5 | 4831 2 | 3813 3 | 6101 4 | 3881 3 | 6088 13 | 6095 7 |
| TX84V1336 | 12 | 3308 10 | 2636 13 | 4289 13 | 3411 11 | 5211 11 | 2754 10 | 7029 1 | 6120 6 |
| OK84343 | 4 | 3569 5 | 2094 18 | 4259 14 | 3307 14 | 5405 8 | 2680 13 | 5282 17 | 5344 17 |
| C0830027 | 21 | 3248 11 | 2742 12 | 4431 8 | 3474 9 | 6182 3 | 2773 9 | 6983 2 | 6583 1 |
| C0830034 | 22 | 3647 2 | 2964 7 | 4513 6 | 3708 5 | 6079 5 | 3403 5 | 6980 3 | 6530 2 |
| Bounty-122 | 38 | 2785 16 | 2548 15 | 4399 10 | 3244 15 | 5643 7 | 3160 6 | 6509 6 | 6076 8 |
| KS82C2338 | 25 | 2921 14 | 2867 9 | 4453 7 | 3413 10 | 4980 14 | 2307 18 | 5712 14 | 5346 16 |
| XW141 | 34 | 2681 17 | 2976 6 | 4315 12 | 3324 13 | 5150 13 | 2570 15 | 6726 4 | 5938 9 |
| NE82533 | 26 | 2900 15 | 3312 2 | 4351 11 | 3521 7 | 4774 16 | 2271 19 | 6360 9 | 5567 13 |
| TXGH10989 | 9 | 3169 12 | 1857 19 | 4119 15 | 3048 17 | 5323 10 | 2736 12 | 5551 15 | 5437 14 |
| KS84HW196 | 24 | 3368 7 | 2377 17 | 3852 18 | 3199 16 | 4328 19 | 2748 11 | 4744 19 | 4536 19 |
| CI13996 | 2 | 3339 9 | 2816 11 | 3878 17 | 3344 12 | 5331 9 | 3699 4 | 5480 16 | 5405 15 |
| C082009 | 20 | 2569 18 | 2552 14 | 3968 16 | 3030 18 | 4979 15 | 3127 7 | 6374 8 | 5677 10 |
| CI11442 | 1 | 2468 19 | 2466 16 | 3178 19 | 2704 19 | 4425 18 | 2448 16 | 5096 18 | 4760 18 |
| MEAN | | 3216 | 2790 | 4332 | 3446 | 5389 | 2968 | 6133 | 5761 |
| LSD(.05) | | 736 | N.S. | 595 | 508 | N.S. | N.S. | 1171 | N.S. |
| C.V. | | 12.2 | 14.6 | 8.0 | 11.1 | 11.2 | 18.3 | 13.1 | 12.6 |

* Not included in state or regional averages.

Table 4. Continued.

| C.I. OR SEL. NO. | ENTRY: NO. | HUTCHINSON* | | HAYS | | MANHATTAN | | GARDEN | | STATE MEAN | | PRESHO | | AMES | | URBANA | |
|---------------------|---------------|-------------|----|--------|----|-----------|----|--------|----|------------|----|-----------|----|------|----|----------|----|
| | | KANSAS | : | KANSAS | : | KANSAS | : | KANSAS | : | KANSAS | : | S. DAKOTA | : | IOWA | : | ILLINOIS | : |
| TXGH10563B | 11 | 2382 | 6 | 3640 | 2 | 4292 | 4 | 2590 | 2 | 3507 | 3 | 2889 | 2 | 3303 | 9 | 5495 | 1 |
| TXGH13622 | 13 | 2423 | 5 | 3762 | 1 | 4642 | 2 | 2727 | 1 | 3711 | 1 | 3136 | 1 | 4027 | 4 | 5318 | 2 |
| TX84V1317 | 14 | 2148 | 8 | 3405 | 7 | 5050 | 1 | 2395 | 4 | 3617 | 2 | 2168 | 12 | 3170 | 11 | 4609 | 8 |
| TX81V6582-2 | 10 | 2746 | 1 | 3578 | 3 | 3757 | 11 | 2380 | 5 | 3238 | 6 | 2511 | 5 | 2148 | 18 | 4366 | 11 |
| TX81V6607-2 | 15 | 2712 | 2 | 3452 | 6 | 4040 | 8 | 2457 | 3 | 3316 | 5 | 2106 | 14 | 2248 | 17 | 3357 | 18 |
| CI17826 | 3 | 1696 | 16 | 3498 | 5 | 3409 | 14 | 2262 | 6 | 3056 | 9 | 2348 | 9 | 4187 | 2 | 5174 | 3 |
| TX84V1336 | 12 | 1656 | 17 | 3231 | 11 | 3959 | 9 | 2151 | 7 | 3114 | 8 | 2004 | 17 | 3172 | 10 | 3884 | 15 |
| OK84343 | 4 | 2549 | 3 | 3561 | 4 | 4342 | 3 | 2096 | 12 | 3333 | 4 | 1994 | 18 | 2738 | 16 | 4883 | 4 |
| C0830027 | 21 | 2187 | 7 | 3158 | 13 | 3802 | 10 | 2118 | 10 | 3026 | 10 | 2547 | 4 | 3515 | 5 | 4560 | 9 |
| C0830034 | 22 | 1967 | 12 | 3296 | 9 | 3660 | 12 | 2011 | 13 | 2989 | 11 | 2379 | 8 | 3475 | 6 | 4168 | 13 |
| Bounty-122 | 38 | 1866 | 14 | 3231 | 11 | 3320 | 16 | 1779 | 17 | 2777 | 16 | 1885 | 19 | 3151 | 12 | 4511 | 10 |
| KS82C2338 | 25 | 2494 | 4 | 3123 | 14 | 4137 | 6 | 2144 | 8 | 3135 | 7 | 2058 | 16 | 2904 | 13 | 4773 | 5 |
| XW141 | 34 | 1908 | 13 | 2759 | 17 | 4169 | 5 | 1758 | 18 | 2895 | 15 | 2271 | 10 | 3423 | 7 | 4755 | 6 |
| NE82533 | 26 | 1574 | 18 | 2905 | 16 | 4050 | 7 | 1799 | 16 | 2918 | 14 | 2492 | 6 | 4156 | 3 | 4749 | 7 |
| TXGH10989 | 9 | 2120 | 9 | 3376 | 8 | 3323 | 15 | 2131 | 9 | 2944 | 12 | 2258 | 11 | 2037 | 19 | 4093 | 14 |
| KS84HW196 | 24 | 2009 | 11 | 3296 | 9 | 3507 | 13 | 1964 | 15 | 2922 | 13 | 2165 | 13 | 2823 | 14 | 4337 | 12 |
| CI13996 | 2 | 1729 | 15 | 3032 | 15 | 2965 | 17 | 1964 | 14 | 2654 | 17 | 2757 | 3 | 4220 | 1 | 3501 | 17 |
| C082009 | 20 | 2011 | 10 | 2648 | 18 | 2930 | 18 | 2112 | 11 | 2563 | 18 | 2396 | 7 | 2745 | 15 | 3641 | 16 |
| CI1442 | 1 | 1369 | 19 | 2039 | 19 | 2151 | 19 | 1556 | 19 | 1915 | 19 | 2059 | 15 | 3380 | 8 | 3169 | 19 |
| MEAN | | 2081 | | 3210 | | 3763 | | 2126 | | 3033 | | 2332 | | 3201 | | 4386 | |
| LSD(.05) | | N.S. | | 452 | | 1025 | | N.S. | | 589 | | 608 | | N.S. | | N.S. | |
| C.V. | | 13.8 | | 8.9 | | 12.0 | | 11.6 | | 11.2 | | 20.4 | | 15.5 | | 10.2 | |

* Not included in state or regional averages.

Table 4. Concluded.

| C.I. OR SEL. NO. | ENTRY: NO. | STILLWATER OKLAHOMA | ALTUS OKLAHOMA | LAHOMA OKLAHOMA | GOODWELL OKLAHOMA | OKLAHOMA STATE MEAN | JULESBURG COLORADO | ABERDEEN IDAHO | LIND* WASHINGTON | REGIONAL AVERAGE | | | | | | | |
|---------------------|---------------|------------------------|-------------------|--------------------|----------------------|------------------------|-----------------------|-------------------|---------------------|---------------------|----|------|----|------|----|------|----|
| TXGH10563B | 11 | 2610 | 10 | 3319 | 9 | 4776 | 5 | 3317 | 7 | 2218 | 2 | 7148 | 1 | 1488 | 5 | 4031 | 1 |
| TXGH13622 | 13 | 2940 | 4 | 3080 | 14 | 4296 | 13 | 3157 | 11 | 2119 | 4 | 6208 | 8 | 1441 | 7 | 3999 | 2 |
| TX84V1317 | 14 | 3602 | 1 | 3937 | 2 | 4710 | 7 | 3742 | 2 | 1460 | 17 | 6340 | 7 | 1122 | 17 | 3982 | 3 |
| TX81V6582-2 | 10 | 2631 | 9 | 3584 | 5 | 4793 | 3 | 3354 | 5 | 1773 | 10 | 6674 | 5 | 1182 | 14 | 3750 | 4 |
| TX81V6607-2 | 15 | 2897 | 5 | 3812 | 3 | 4820 | 2 | 3449 | 4 | 1717 | 11 | 6801 | 4 | 1184 | 13 | 3743 | 5 |
| CI17826 | 3 | 2242 | 15 | 2976 | 15 | 4370 | 11 | 2958 | 14 | 2138 | 3 | 6827 | 3 | 1430 | 8 | 3729 | 6 |
| TX84V1336 | 12 | 2646 | 8 | 3805 | 4 | 4765 | 6 | 3466 | 3 | 1132 | 18 | 6620 | 6 | 1444 | 6 | 3723 | 7 |
| OK84343 | 4 | 3120 | 2 | 4202 | 1 | 4792 | 4 | 3825 | 1 | 1873 | 7 | 5748 | 11 | 1142 | 15 | 3703 | 8 |
| C0830027 | 21 | 2479 | 11 | 3578 | 6 | 4426 | 9 | 3174 | 10 | 1539 | 16 | 5173 | 16 | 1283 | 10 | 3694 | 9 |
| C0830034 | 22 | 2679 | 7 | 3081 | 13 | 3715 | 18 | 2933 | 15 | 1625 | 14 | 6080 | 9 | 1729 | 2 | 3614 | 10 |
| Bounty-122 | 38 | 2382 | 13 | 3303 | 10 | 4672 | 8 | 3197 | 9 | 2002 | 5 | 6933 | 2 | 1407 | 9 | 3614 | 11 |
| KS82C2338 | 25 | 2970 | 3 | 3543 | 7 | 4345 | 12 | 3342 | 6 | 2308 | 1 | 5627 | 13 | 1218 | 12 | 3574 | 12 |
| XW141 | 34 | 1970 | 18 | 3096 | 12 | 4858 | 1 | 3087 | 12 | 1609 | 15 | 5726 | 12 | 961 | 19 | 3452 | 13 |
| NE82533 | 26 | 2263 | 14 | 2771 | 16 | 3953 | 16 | 2740 | 16 | 1777 | 9 | 5490 | 15 | 1280 | 11 | 3436 | 14 |
| TXGH10989 | 9 | 2788 | 6 | 3342 | 8 | 4390 | 10 | 3228 | 8 | 1823 | 8 | 5580 | 14 | 1126 | 16 | 3431 | 15 |
| KS84HW196 | 24 | 2383 | 12 | 3177 | 11 | 4028 | 14 | 2968 | 13 | 1686 | 13 | 4680 | 18 | 1015 | 18 | 3242 | 16 |
| CI13996 | 2 | 1991 | 17 | 2752 | 17 | 4023 | 15 | 2737 | 17 | 1925 | 6 | 4767 | 17 | 1726 | 3 | 3237 | 17 |
| C082009 | 20 | 2006 | 16 | 2712 | 18 | 3935 | 17 | 2646 | 18 | 1702 | 12 | 5790 | 10 | 1801 | 1 | 3143 | 18 |
| CI1442 | 1 | 1349 | 19 | 1726 | 19 | 2972 | 19 | 1796 | 19 | 821 | 19 | 3191 | 19 | 1586 | 4 | 2394 | 19 |
| MEAN | | 2524 | | 3252 | | 4350 | | 3111 | | 1750 | | 5863 | | 1346 | | 3552 | |
| LSD(.05) | | N.S. | | 911 | | 661 | | 472 | | N.S. | | N.S. | | N.S. | | 316 | |
| C.V. | | 11.3 | | 5.4 | | 9.4 | | 9.2 | | 14.9 | | 14.3 | | 16.2 | | 12.3 | |

* Not included in regional averages.

Table 5. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 45 entries in the 1988 Southern Regional Performance Nursery grown at 26 locations.

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : MEAN YIELD : : OVER 26 : LOCATIONS : KG/HA : | : REGRESSION : : COEFFICIENT : (b) : | : CORRELATION : : COEFFICIENT : (r) : | : COEFFICIENT : : OF : DETERMINATION : (r ²) : |
|---------------------|---------------------|---|--|---|---|
| TXGH13622 | 13 | 3798 | 1.07 | 0.94 | 0.89 |
| TXGH10563B | 11 | 3757 | 1.14 | 0.96 | 0.92 |
| AGC-112 | 32 | 3730 | 1.02 | 0.95 | 0.90 |
| XH675 | 36 | 3667 | 1.12 | 0.98 | 0.96 |
| TX84V1336 | 12 | 3662 | 1.16 | 0.96 | 0.93 |
| XW161 | 35 | 3657 | 1.14 | 0.97 | 0.94 |
| TX87HA1 | 45 | 3649 | 1.01 | 0.95 | 0.91 |
| RL844677 | 30 | 3639 | 1.06 | 0.97 | 0.94 |
| XH685 | 37 | 3598 | 1.11 | 0.98 | 0.95 |
| OK86215 | 8 | 3590 | 1.04 | 0.97 | 0.94 |
| TX84V1317 | 14 | 3587 | 1.19 | 0.98 | 0.96 |
| IL80-1251 | 44 | 3507 | 1.02 | 0.97 | 0.94 |
| OK84286 | 5 | 3505 | 1.05 | 0.95 | 0.91 |
| NA-W83-256 | 41 | 3494 | 0.98 | 0.98 | 0.95 |
| NE82656 | 29 | 3449 | 0.84 | 0.92 | 0.85 |
| TX86A7041 | 17 | 3443 | 1.12 | 0.94 | 0.88 |
| TX81V6607-2 | 15 | 3434 | 1.05 | 0.82 | 0.67 |
| NE83407 | 28 | 3425 | 0.87 | 0.94 | 0.88 |
| C0830027 | 21 | 3424 | 1.13 | 0.97 | 0.95 |
| C0830034 | 22 | 3420 | 1.01 | 0.95 | 0.90 |
| AGC-113 | 33 | 3420 | 1.00 | 0.90 | 0.80 |
| CI17826 | 3 | 3417 | 1.00 | 0.94 | 0.89 |
| NA-W81-162-W | 42 | 3408 | 1.07 | 0.98 | 0.97 |
| RL845472 | 31 | 3405 | 0.82 | 0.94 | 0.89 |
| TX81V6582-2 | 10 | 3365 | 1.06 | 0.88 | 0.77 |
| OK84287 | 6 | 3361 | 1.04 | 0.95 | 0.91 |
| TX84V1736 | 16 | 3355 | 1.03 | 0.95 | 0.89 |
| KS82C2338 | 25 | 3354 | 0.94 | 0.98 | 0.95 |
| TX86V1110 | 19 | 3349 | 0.99 | 0.96 | 0.91 |
| NE84557 | 27 | 3346 | 0.86 | 0.96 | 0.93 |
| TX86V1109 | 18 | 3342 | 0.97 | 0.97 | 0.93 |
| WH180001 | 39 | 3336 | 1.10 | 0.95 | 0.91 |
| OK84343 | 4 | 3300 | 1.06 | 0.90 | 0.80 |
| OK86197 | 7 | 3278 | 0.91 | 0.96 | 0.91 |
| NA-W84-229 | 40 | 3268 | 1.09 | 0.94 | 0.87 |
| IL83-7439 | 43 | 3210 | 0.88 | 0.93 | 0.86 |
| NE82533 | 26 | 3187 | 0.83 | 0.92 | 0.85 |
| TXGH10989 | 9 | 3181 | 1.07 | 0.90 | 0.81 |
| Bounty-122 | 38 | 3134 | 1.07 | 0.96 | 0.92 |
| XW141 | 34 | 3074 | 1.10 | 0.95 | 0.90 |
| CI13996 | 2 | 3044 | 0.69 | 0.92 | 0.84 |
| KS84HW196 | 24 | 2984 | 0.78 | 0.89 | 0.78 |
| C0830014 | 23 | 2973 | 0.92 | 0.93 | 0.87 |
| C082009 | 20 | 2905 | 0.86 | 0.93 | 0.86 |
| CI1442 | 1 | 2270 | 0.73 | 0.84 | 0.71 |

Table 6. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 19 entries in the 1987 and 1988 Southern Regional Performance Nurseries grown at 21 locations.

| C.I. OR SEL. NO. | : ENTRY: NO. | : MEAN YIELD : OVER 21 : LOCATIONS : KG/HA : | : REGRESSION : COEFFICIENT : (b) : | : CORRELATION : COEFFICIENT : (r) : | : COEFFICIENT : OF : DETERMINATION : (r ²) : |
|---------------------|--------------------|---|---|--|---|
| TXGH10563B | 11 | 4031 | 1.08 | 0.96 | 0.92 |
| TXGH13622 | 13 | 3999 | 0.98 | 0.95 | 0.90 |
| TX84V1317 | 14 | 3982 | 1.04 | 0.96 | 0.92 |
| TX81V6582-2 | 10 | 3750 | 1.15 | 0.92 | 0.85 |
| TX81V6607-2 | 15 | 3743 | 1.13 | 0.90 | 0.81 |
| CI17826 | 3 | 3729 | 1.08 | 0.95 | 0.90 |
| TX84V1336 | 12 | 3723 | 1.09 | 0.93 | 0.87 |
| OK84343 | 4 | 3703 | 0.98 | 0.91 | 0.82 |
| C0830027 | 21 | 3694 | 1.08 | 0.96 | 0.92 |
| C0830034 | 22 | 3614 | 1.04 | 0.95 | 0.90 |
| Bounty-122 | 38 | 3614 | 1.21 | 0.96 | 0.93 |
| KS82C2338 | 25 | 3574 | 0.90 | 0.96 | 0.93 |
| XW141 | 34 | 3452 | 1.09 | 0.95 | 0.89 |
| NE82533 | 26 | 3436 | 0.93 | 0.93 | 0.86 |
| TXGH10989 | 9 | 3431 | 1.00 | 0.94 | 0.88 |
| KS84HW196 | 24 | 3242 | 0.79 | 0.92 | 0.85 |
| CI13996 | 2 | 3237 | 0.78 | 0.88 | 0.78 |
| C082009 | 20 | 3143 | 0.98 | 0.95 | 0.90 |
| CI1442 | 1 | 2394 | 0.69 | 0.79 | 0.63 |

Table 7. Summary of agronomic and yield data for 45 wheats in the 1988 Southern Regional Performance Nursery.

| VARIETY OR PEDIGREE | C.I. OR SEL. NO. | :ENTRY: NO. | : PLANT : HEIGHT : CM | : DAYS TO : HEADING : FROM 1/1: | : DAYS TO : RIPENING: FROM 1/1: | : LODGING : % |
|---|------------------|-------------|-----------------------|---------------------------------|---------------------------------|---------------|
| Number of Trials | | | | | | |
| TX71A562-6*4/Amigo*4//Largo | TXGH13622 | 13 | 77 | 134 | 182 | 21 |
| TAM-105*4/Amigo*4//Largo | TXGH105638 | 11 | 77 | 132 | 181 | 12 |
| HRW Selection | AGC-112 | 32 | 76 | 133 | 179 | 13 |
| Winter Wheat Hybrid | XH675 | 36 | 82 | 134 | 181 | 4 |
| KS73146/TX71A1039 | TX84V1336 | 12 | 72 | 132 | 181 | 10 |
| TAM W-101/W603//W558 | XW161 | 35 | 68 | 131 | 178 | 0 |
| MUST/3/T-105*4/AMI*4//LARGO, TXGH10289 | TX87HA1 | 45 | 80 | 133 | 182 | 3 |
| Winter Wheat Line | RL844677 | 30 | 83 | 136 | 183 | 5 |
| Winter Wheat Hybrid | XH685 | 37 | 82 | 134 | 181 | 5 |
| OK79257/Century Sib/2/Chisholm | OK86215 | 8 | 75 | 132 | 180 | 8 |
| TX71A374-4/TX71A1039-V1 | TX84V1317 | 14 | 71 | 133 | 180 | 13 |
| TX69A330/IL76-3820 | IL80-1251 | 44 | 78 | 136 | 179 | 3 |
| Payne*2/C0725052 | OK84286 | 5 | 74 | 134 | 180 | 6 |
| Payne/W78-069 | NA-W83-256 | 41 | 77 | 135 | 182 | 12 |
| Brule/3/Parker*4/Agent//Belot.198/Lcr | NE82656 | 29 | 79 | 137 | 181 | 5 |
| TAM-108/Arkan | TX86A7041 | 17 | 71 | 136 | 179 | 7 |
| TX71A1039-V1*3/Amigo | TX81V6607-2 | 15 | 69 | 134 | 181 | 11 |
| Complex Pedigree | NE83407 | 28 | 74 | 137 | 181 | 4 |
| 74cb462/Trapper//Vona | C0830027 | 21 | 81 | 134 | 182 | 22 |
| C05926//7C/Tobari 63/3/Baca | C0830034 | 22 | 83 | 137 | 182 | 9 |
| HRW Selection | AGC-113 | 33 | 79 | 137 | 182 | 18 |
| TAM-105 | C117826 | 3 | 75 | 134 | 180 | 7 |
| OK11252A/W79-1226 | NA-W81-162-W | 42 | 70 | 134 | 188 | 3 |
| Winter Wheat Line | RL845472 | 31 | 80 | 136 | 180 | 8 |
| Sturdy*3/Amigo | TX81V6582-2 | 10 | 69 | 132 | 180 | 11 |
| Payne*2/C0725052 | OK84287 | 6 | 74 | 134 | 182 | 5 |
| TAM-106 resel./TX69D4819 | TX84V1736 | 16 | 68 | 132 | 185 | 21 |
| Bulk Selection | KS82C2338 | 25 | 76 | 133 | 179 | 4 |
| Rannaya/NE701136//C113449/Ctk | TX86V1110 | 19 | 82 | 133 | 178 | 23 |
| Wrr/Sut//MoW6811/3/Agas S/4/NE68457/Ctk78 | NE84557 | 27 | 83 | 137 | 180 | 14 |
| Rannaya/NE701136//C113449/Ctk | TX86V1109 | 18 | 82 | 133 | 177 | 26 |
| Bounty Hybrid Wheat | WH180001 | 39 | 81 | 136 | 181 | 5 |
| Aurora/2*TAM W-101 | OK84343 | 4 | 73 | 135 | 180 | 1 |
| Hawk/OK80099 | OK86197 | 7 | 76 | 133 | 179 | 26 |
| W79-227/Payne | NA-W84-229 | 40 | 71 | 135 | 182 | 0 |
| IL77-4259/IL76-3845 | IL83-7439 | 43 | 80 | 136 | 180 | 16 |
| KS73167/Agate//Sage sib | NE82533 | 26 | 73 | 137 | 181 | 2 |
| TAM W-101*4/Amigo*4//Largo | TXGH10989 | 9 | 79 | 134 | 182 | 29 |
| Bounty Hybrid Wheat | Bounty-122 | 38 | 76 | 134 | 183 | 3 |
| Bezostaya/TAM W-101//W558 | XW141 | 34 | 69 | 136 | 182 | 2 |
| Scout 66 | C113996 | 2 | 90 | 136 | 180 | 30 |
| Bsn/Strling//3*Sut/3/Eag/4/Pinnacle/2*Eag | KS84HW196 | 24 | 74 | 133 | 186 | 21 |
| 74cb452/Vona//Baca | C0830014 | 23 | 85 | 134 | 181 | 6 |
| 74F878/Wings//Vona | C082009 | 20 | 82 | 138 | 184 | 17 |
| Kharkof | C11442 | 1 | 92 | 142 | 185 | 35 |

Table 7. Concluded.

| C.I. OR SEL. NO. | : : NO. : | : WINTER : SURVIVAL : | : STRAW : STRENGTH : | : LEAF RUST: : SEVERITY : | : SEPTORIA: : 0-9 : | : BYD : VIRUS : | : MILDW : % : | : VOLUME : WEIGHT : | : YIELD : KG/HA : |
|---------------------|------------------|--------------------------|-------------------------|------------------------------|------------------------|--------------------|------------------|------------------------|----------------------|
| | Number of Trials | 3 | 1 | 5 | 1 | 2 | 1 | 25 | 26 |
| TXGH13622 | 13 | 60 | 3 | 31 | 7 | 6 | 0 | 75.6 | 3798 |
| TXGH10563B | 11 | 66 | 3 | 30 | 6 | 7 | 0 | 74.2 | 3757 |
| AGC-112 | 32 | 81 | 2 | 35 | 7 | 7 | 0 | 74.1 | 3730 |
| XH675 | 36 | 58 | 3 | 15 | 6 | 5 | 0 | 74.3 | 3667 |
| TX84V1336 | 12 | 53 | 3 | 11 | 7 | 7 | 5 | 75.3 | 3662 |
| XW161 | 35 | 66 | 1 | 3 | 6 | 5 | 20 | 74.6 | 3657 |
| TX87HA1 | 45 | 73 | 3 | 22 | 6 | 7 | 0 | 75.4 | 3649 |
| RL844677 | 30 | 62 | 3 | 5 | 6 | 6 | 0 | 75.6 | 3639 |
| XH685 | 37 | 67 | 3 | 13 | 7 | 5 | 50 | 73.7 | 3598 |
| OK86215 | 8 | 65 | 2 | 15 | 7 | 6 | 0 | 75.2 | 3590 |
| TX84V1317 | 14 | 42 | 3 | 7 | 7 | 7 | 5 | 76.3 | 3587 |
| IL80-1251 | 44 | 72 | 3 | 8 | 6 | 6 | 0 | 74.4 | 3507 |
| OK84286 | 5 | 64 | 3 | 14 | 6 | 6 | 60 | 75.6 | 3505 |
| NA-W83-256 | 41 | 63 | 2 | 19 | 6 | 5 | 60 | 73.8 | 3494 |
| NE82656 | 29 | 77 | 3 | 4 | 6 | 5 | 0 | 72.6 | 3449 |
| TX86A7041 | 17 | 64 | 3 | 4 | 6 | 6 | 0 | 71.3 | 3443 |
| TX81V6607-2 | 15 | 4 | 3 | 6 | 6 | 5 | 0 | 78.1 | 3434 |
| NE83407 | 28 | 69 | 3 | 19 | 6 | 5 | 0 | 72 | 3425 |
| C0830027 | 21 | 47 | 4 | 15 | 7 | 6 | 0 | 76.9 | 3424 |
| C0830034 | 22 | 54 | 3 | 28 | 7 | 6 | 0 | 74.7 | 3420 |
| AGC-113 | 33 | 76 | 4 | 22 | 7 | 6 | 0 | 71.8 | 3420 |
| C117826 | 3 | 69 | 2 | 35 | 7 | 7 | 25 | 73.4 | 3417 |
| NA-W81-162-W | 42 | 50 | 2 | 9 | 6 | 6 | 60 | 75.5 | 3408 |
| RL845472 | 31 | 71 | 4 | 6 | 6 | 6 | 0 | 76.1 | 3405 |
| TX81V6582-2 | 10 | 17 | 2 | 17 | 5 | 7 | 0 | 76.9 | 3365 |
| OK84287 | 6 | 62 | 2 | 15 | 6 | 4 | 0 | 75.8 | 3361 |
| TX84V1736 | 16 | 61 | 2 | 14 | 6 | 7 | 0 | 75.6 | 3355 |
| KS82C2338 | 25 | 51 | 3 | 27 | 6 | 7 | 0 | 76.4 | 3354 |
| TX86V1110 | 19 | 71 | 3 | 5 | 7 | 6 | 5 | 73.3 | 3349 |
| NE84557 | 27 | 52 | 2 | 9 | 7 | 6 | 0 | 76.4 | 3346 |
| TX86V1109 | 18 | 69 | 3 | 4 | 6 | 6 | 10 | 74.6 | 3342 |
| WH180001 | 39 | 41 | 3 | 12 | 5 | 5 | 0 | 73.9 | 3336 |
| OK84343 | 4 | 36 | 2 | 7 | 6 | 5 | 0 | 74.5 | 3300 |
| OK86197 | 7 | 57 | 3 | 19 | 6 | 6 | 40 | 75.1 | 3278 |
| NA-W84-229 | 40 | 38 | 1 | 9 | 6 | 7 | 50 | 74.8 | 3268 |
| IL83-7439 | 43 | 76 | 1 | 5 | 6 | 6 | 0 | 74.9 | 3210 |
| NE82533 | 26 | 62 | 3 | 20 | 6 | 6 | 0 | 75 | 3187 |
| TXGH10989 | 9 | 25 | 3 | 20 | 5 | 4 | 0 | 73.6 | 3181 |
| Bounty-122 | 38 | 44 | 2 | 24 | 7 | 7 | 50 | 71.8 | 3134 |
| XW141 | 34 | 72 | 2 | 7 | 6 | 7 | 0 | 71.2 | 3074 |
| C113996 | 2 | 75 | 5 | 27 | 6 | 7 | 5 | 75.8 | 3044 |
| KS84HW196 | 24 | 44 | 2 | 22 | 8 | 7 | 0 | 76.3 | 2984 |
| C0830014 | 23 | 39 | 2 | 26 | 6 | 7 | 0 | 75.3 | 2973 |
| C082009 | 20 | 58 | 2 | 16 | 7 | 6 | 0 | 75.7 | 2905 |
| C11442 | 1 | 75 | 5 | 28 | 6 | 6 | 10 | 73.2 | 2270 |

Table 8. Seedling reaction of entries of the 1988 Southern Regional Performance Nursery to selected isolates of *Puccinia graminis* f.sp. *tritici* (by D. V. McVey, U.S.D.A., A.R.S., Cereal Rust Laboratory, U. of MN, St. Paul, MN).

| No. | | Name or sel. no. | Reaction produced by isolates | | | | | | | Spec. sr gene |
|-----|-------------|---------------------|-------------------------------|---------------------------|----------------------------|----------------------------|---------------------------|--------------------------|-----------------------------|------------------|
| | | | 72- 00- 1370C QFBS | 69- 21- 399 QSHS | 71- 21- 584B RHRS | 72- 25- 639C RKQS | 72- 00- 53A RTQQ | 72- 01- 4A TNMH | 74- 21- 1409A TNMK | |
| | | | 151 | 11-32-113 | | | 15B-2 | | | |
| 1 | Kharkof | s | s | s | s | s | s | s | none | |
| 2 | Scout 66 | s | s | s | s | s | ;1n | s | 17 | |
| 3 | TAM-105 | 32 | 2 | 23 | 23 | 23 | 23 | s | Time | |
| 4 | OK84343 | ;1 | 2= | ;1 | ;1 | ;1 | 2= | 2= | 31 | |
| 5 | OK84286 | ;1 | 2= | ;1 | ;1 | ;1 | 2= | 2= | + | |
| 6 | OK84287 | ;1 | 2= | ;1 | ;1 | ;1 | 2= | 2= | + | |
| 7 | OK86197 | ;2 | 2= | 2= | 2= | 2= | 2=; | 2=; | Seg.6 | |
| 8 | OK86215 | 2 | 2= | 2= | 2= | 2= | 2= | 2= | none | |
| 9 | TXGH10989 | 2= | 2= | 2= | 2= | 2= | 2= | 2= | Amigo | |
| 10 | TX81V6582-2 | 1 | 2= | 2= | 2= | 2= | 2= | 2= | Amigo | |
| 11 | TXGH10563B | 2= | 2= | 2= | 2= | 2= | 2= | 2= | Amigo | |
| 12 | TX84V1336 | s | s | s | s | s | s | s | none | |
| 13 | TXGH13622 | 2= | 2= | 2= | 2= | ;1-,xcn | ;1-,xcn | 2= | Amigo,Seg.17 | |
| 14 | TX84V1317 | s | s | s | s | s | s | s | none | |
| 15 | TX81V6607-2 | 2= | 2= | 2= | 2= | 2= | 2= | 2= | Amigo | |
| 16 | TX84V1736 | s | s | s | s | ;1-n | ;1n | s | 17 | |
| 17 | TX86A7041 | ;1 | 2= | 2= | ;1- | 2= | ;1n | ;1n | 6,24 | |
| 18 | TX86V1109 | s | s | s | s | s | s | s | none | |
| 19 | TX86V1110 | s | s | s | s | s | s | s | none | |
| 20 | C082009 | -- | 2 | 2= | 2= | 2= | ;1n | 2 | 17,+ | |
| 21 | C0830027 | ;1 | 23 | ;1 | ;1 | ;1 | ;1 | x,s | 11,17 | |
| 22 | C0830034 | ;1 | s | ;1 | ;1 | ;1 | ;1 | s | 11,17 | |
| 23 | C0830014 | ;1 | s | ;1 | ;1 | ;1 | ;1 | s | 11,17 | |
| 24 | KS84HW196 | s | s | s | s | s | s | s | none | |
| 25 | KS82C2338 | ;1 | s | s | s | s | ;1n | ;1n | 6,17 | |

Table 8. Continued.

| No. | Name or sel. no. | Reaction produced by isolates | | | | | | | | | | Spec. sr gene |
|-----|---------------------|-------------------------------|---------------------------|----------------------------|----------------------------|---------------------------|--------------------------|-----------------------------|-------|----|----------|------------------|
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | 72- 00- 1370C QFBS | 69- 21- 399 QSHS | 71- 21- 584B RHRS | 72- 25- 639C RKQS | 72- 00- 53A RTQQ | 72- 01- 4A TNMH | 74- 21- 1409A TNMK | 15B-2 | | | |
| | | | | | | | | | | | | |
| 26 | NE82533 | 2= | 2= | 2- | 2= | ; | ; | 2- | 2= | 2- | 17,24 | |
| 27 | NE84557 | ; | 2= | 2= | 2= | ; | ; | ; | ; | ; | 6,17,24 | |
| 28 | NE83407 | ; | 2- | 2= | 2 | ; | ; | ; | ; | ; | 6,17,24 | |
| 29 | NE82656 | ; | 2=cn | 2=cn | 2 | ; | ; | ; | ; | ; | 6,17,24 | |
| 30 | RL844677 | 23 | s | s | s | ; | ; | 23 | 23 | 23 | 17 | |
| 31 | RL845472 | 2 | 2 | 2 | 2 | ; | ; | 2 | 2 | 2 | 17,+ | |
| 32 | AGC-112 | 2= | 2 | 2 | 2= | 2= | 2= | 2= | 2= | 2= | + | |
| 33 | AGC-113 | ; | 2- | 2 | 23 | ; | ; | ; | ; | ; | 6,17,+ | |
| 34 | XW-141 | 2 | 2 | 2 | 2 | 23 | 23 | 23 | 23 | 23 | none | |
| 35 | XW-161 | 2= | 2- | 2- | 2- | ; | ; | ; | ; | s | 17,Tmp | |
| 36 | XH-675 | 2= | 2- | 2- | 2- | 2- | 2 | 2 | 2 | 2 | 24 or 31 | |
| 37 | XH-685 | ;1n,s | s | x | 2 | 2 | x,s | s | s | s | none | |
| 38 | Bounty 122 | ; | 2- | 2= | 2- | 2= | ;1 | ; | ; | ; | 6,+ | |
| 39 | WH180001 | ; | 2-cn | 2-cn | 23 | xcn | ;1n | ; | ; | ; | 6+ | |
| 40 | NA-W84-229 | ; | 2 | x | ; | 2= | 32 | 23 | 23 | 23 | + | |
| 41 | NA-W83-256 | ; | 2 | 2- | 2- | 2- | ; | ; | ; | ; | 6,17 | |
| 42 | NA-W81-162W | ;1 | 2- | ;1 | 2= | 2- | 32 | 23 | 23 | 23 | + | |
| 43 | IL83-7439 | 2= | 2- | 2= | 2= | ; | ; | 2= | 2= | 2= | 17 | |
| 44 | IL80-1251 | s | s | s | s | s | s | s | s | s | none | |
| 45 | TX87HAI | ; | 23 | x,s | 23 | 2- | ;1- | ; | ; | ; | 6,Amigo | |

n = necrosis; c = chlorosis

Table 9. Adult plant field reaction of entries of the 1988 Southern Regional Performance Nursery to Puccinia graminis f.sp. tritici (by D. V. McVey, U.S.D.A., A.R.S., Cereal Rust Laboratory, U. of MN, St. Paul, MN).

| No. | Name or sel. no. | Stem rust 6/22 |
|-----|---------------------|-------------------|
| 1 | Kharkof | TS |
| 2 | Scout 66 | TS |
| 3 | TAM-105 | 10S |
| 4 | OK84343 | 0 |
| 5 | OK84286 | TR |
| 6 | OK84287 | TR |
| 7 | OK86197 | TR |
| 8 | OK86215 | TR |
| 9 | TXGH10989 | TR |
| 10 | TX81V6582-2 | TR |
| 11 | TXGH10563B | TR |
| 12 | TX84V1336 | TR |
| 13 | TXGH13622 | TR |
| 14 | TX84V1317 | 30S |
| 15 | TX81V6607-2 | TR |
| 16 | TX84V1736 | 10S |
| 17 | TX86A7041 | TR |
| 18 | TX86V1109 | 5MS-S |
| 19 | TX86V1110 | 5MS-S |
| 20 | C082009 | TR |
| 21 | C0830027 | TR |
| 22 | C0830034 | TS |
| 23 | C0830014 | TS |
| 24 | KS84HW196 | TR |
| 25 | KS82C2338 | TR |
| 26 | NE82533 | TR |
| 27 | NE84557 | TR |
| 28 | NE83407 | TR |
| 29 | NE82656 | 0 |
| 30 | RL844677 | TMR |
| 31 | RL845472 | TMR |
| 32 | AGC-112 | TR |
| 33 | AGC-113 | TS |
| 34 | XW-141 | TS |
| 35 | XW-161 | 10S |
| 36 | XH-675 | 10S |
| 37 | XH-685 | 20S |
| 38 | Bounty 122 | 5MS-S |
| 39 | WH180001 | 20S |
| 40 | NA-W84-229 | 0 |
| 41 | NA-W83-256 | 0 |
| 42 | NA-W81-162W | 0 |
| 43 | IL83-7439 | TR |
| 44 | IL80-1251 | 10S |
| 45 | TX87HAI | TR |

Table 10. Hessian fly reaction, Great Plains biotype,
1988 Southern Regional Performance Nursery.
(Data provided by J. H. Hatchett, USDA-ARS,
Manhattan, KS.)

| ENTRY NO. | C.I. OR SEL. NO. | REACTION TYPE | NO. OF PLANTS | |
|--------------|---------------------|------------------|---------------|----|
| | | | R | S |
| 1 | CI1442 | S | | |
| 2 | CI13996 | S | | |
| 3 | CI17826 | S | | |
| 4 | OK84343 | S | | |
| 5 | OK84286 | H | 9 | 14 |
| 6 | OK84287 | H | 7 | 13 |
| 7 | OK86197 | H | 6 | 11 |
| 8 | OK86215 | S | | |
| 9 | TXGH10989 | S | | |
| 10 | TX81V6582-2 | S | | |
| 11 | TXGH10563B | S | | |
| 12 | TX84V1336 | S | | |
| 13 | TXGH13622 | S | | |
| 14 | TX84V1317 | S | | |
| 15 | TX81V6607-2 | S | | |
| 16 | TX84V1736 | S | | |
| 17 | TX86A7041 | S | | |
| 18 | TX86V1109 | S | | |
| 19 | TX86V1110 | S | | |
| 20 | C082009 | H | 8 | 16 |
| 21 | C0830027 | S | | |
| 22 | C0830034 | S | | |
| 23 | C0830014 | S | | |
| 24 | KS84HW196 | S | | |
| 25 | KS82C2338 | S | | |
| 26 | NE82533 | H | 5 | 16 |
| 27 | NE84557 | H | 8 | 13 |
| 28 | NE83407 | H | 5 | 17 |
| 29 | NE82656 | R | | |
| 30 | RL844677 | H | 7 | 20 |
| 31 | RL845472 | H | 19 | 3 |
| 32 | AGC-112 | S | | |
| 33 | AGC-113 | S | | |
| 34 | XW141 | S | | |
| 35 | XW161 | H | 17 | 7 |
| 36 | XH675 | S | | |
| 37 | XH685 | S | | |
| 38 | Bounty-122 | S | | |
| 39 | WH180001 | S | | |
| 40 | NA-W84-229 | H | 5 | 21 |
| 41 | NA-W83-256 | S | | |
| 42 | NA-W81-162-W | S | | |
| 43 | IL83-7439 | S | | |
| 44 | IL80-1251 | H | 10 | 13 |
| 45 | TX87HA1 | S | | |

Table 11. Virus reactions of entries in the 1988 Southern Regional Performance Nursery. (Data provided by A. D. Hewings and F. L. Kolb, Urbana, Illinois.)

| ENTRY NO. | C.I. OR SEL. NO. | : BARLEY YELLOW : | : SOILBORNE : | Rep 1 | Rep 2 |
|-----------|------------------|-------------------|---------------|-------|-------|
| | | : DWARF : | : MOSAIC : | | |
| | | : 0-9 : | : 0-9 : | | |
| 1 | CI1442 | 4 | 8 | 7 | |
| 2 | CI13996 | 6 | 8 | 7 | |
| 3 | CI17826 | 4 | 7 | 8 | |
| 4 | OK84343 | 3 | 7 | 6 | |
| 5 | OK84286 | 4 | 8 | 6 | |
| 6 | OK84287 | 4 | 8 | 7 | |
| 7 | OK86197 | 5 | 4 | 3 | |
| 8 | OK86215 | 7 | 8 | 8 | |
| 9 | TXGH10989 | 6 | 8 | 7 | |
| 10 | TX81V6582-2 | 4 | 8 | 7 | |
| 11 | TXGH10563B | 6 | 8 | 7 | |
| 12 | TX84V1336 | 5 | 7 | 6 | |
| 13 | TXGH13622 | 4 | 6 | 5 | |
| 14 | TX84V1317 | 5 | 6 | 5 | |
| 15 | TX81V6607-2 | 4 | 8 | 8 | |
| 16 | TX84V1736 | 8 | 8 | 7 | |
| 17 | TX86A7041 | 5 | 6 | 7 | |
| 18 | TX86V1109 | 6 | 7 | 7 | |
| 19 | TX86V1110 | 5 | 8 | 7 | |
| 20 | C082009 | 5 | 8 | 8 | |
| 21 | C0830027 | 6 | 9 | 8 | |
| 22 | C0830034 | 6 | 8 | 6 | |
| 23 | C0830014 | 7 | 8 | 8 | |
| 24 | KS84HW196 | 7 | 7 | 8 | |
| 25 | KS82C2338 | 7 | 5 | 4 | |
| 26 | NE82533 | 6 | 4 | 3 | |
| 27 | NE84557 | 6 | 5 | 5 | |
| 28 | NE83407 | 4 | 6 | 7 | |
| 29 | NE82656 | 5 | 7 | 6 | |
| 30 | RL844677 | 6 | 2 | 4 | |
| 31 | RL845472 | 7 | 8 | 7 | |
| 32 | AGC-112 | 6 | 8 | 7 | |
| 33 | AGC-113 | 6 | 2 | 4 | |
| 34 | XW141 | 7 | 3 | 6 | |
| 35 | XW161 | 4 | 2 | 5 | |
| 36 | XH675 | 7 | 6 | 6 | |
| 37 | XH685 | 4 | 6 | 6 | |
| 38 | Bounty-122 | 4 | 8 | 8 | |
| 39 | WH180001 | 6 | 6 | 6 | |
| 40 | NA-W84-229 | 6 | 5 | 5 | |
| 41 | NA-W83-256 | 6 | 4 | 4 | |
| 42 | NA-W81-162-W | 7 | 3 | 3 | |
| 43 | IL83-7439 | 6 | 3 | 3 | |
| 44 | IL80-1251 | 6 | 7 | 7 | |
| 45 | TX87HA1 | 6 | 5 | 5 | |

Table 12. Aluminum tolerance of lines tested in the 1988 SRPN based on hematoxylin staining of seedling roots. (Data provided by B.F. Carver, Stillwater, OK)

| Entry No. | Selection No. | Stain Intensity ^a | | | Rating ^b |
|-----------|---------------|------------------------------|------|------|---------------------|
| | | Al Concentration (mM) | 0.18 | 0.36 | 0.72 |
| 1 | Kharkof | C | C | C | VS |
| 2 | Scout 66 | C | C | C | VS |
| 3 | TAM 105 | C | C | C | VS |
| 4 | OK84343 | P | P | C | I |
| 5 | OK84286 | P | C | C | MS |
| 6 | OK84287 | P | C | C | MS |
| 7 | OK86197 | P | C | C | MS |
| 8 | OK86215 | P | P | C | I |
| 9 | TXGH10989 | P | P | C | I |
| 10 | TX81V6582-2 | P | C | C | MS |
| 11 | TXGH10563B | C | C | C | VS |
| 12 | TX84V1336 | N | P | P | T |
| 13 | TXGH13622 | P/C/N | C/P | C | VS-I* |
| 14 | TX84V1317 | N | P | P | T |
| 15 | TX81V6607-2 | N | P | P | T |
| 16 | TX84V1736 | P/C/N | P/C | P/C | VS-T* |
| 17 | TX86A7041 | C | C | C | VS |
| 18 | TX86V1109 | P | P | P | T |
| 19 | TX86V1110 | N | P | P | T |
| 20 | C082009 | P | C/P | C | MS-I* |
| 21 | C0830027 | P | C | C | MS |
| 22 | C0830034 | P | C/P | C | MS-I* |
| 23 | C0830014 | P | C | C | MS |
| 24 | KS84HW196 | C/P | C/P | C | VS-I* |
| 25 | KS82C2338 | P/C | C/P | C | VS-I* |
| 26 | NE82533 | C | C | C | VS |
| 27 | NE84557 | C/P | C | C | VS-MS* |
| 28 | NE83407 | C | C | C | VS |
| 29 | NE82656 | P | C | C | MS |
| 30 | RL844677 | P | P/C | C | MS-I* |
| 31 | RL845472 | C | C | C | VS |
| 32 | AGC-112 | C | C | C | VS |
| 33 | AGC-113 | P | C/P | C | MS-I* |
| 34 | XW141 | N | N | P | T |
| 35 | XW161 | N | N | P | T |
| 36 | XH675 | P | C | C | MS |
| 37 | XH685 | P | C | C | MS |
| 38 | Bounty-122 | N | N | P | T |
| 39 | WH180001 | N | P | P | T |
| 40 | NA-W84-229 | P | P | P | T |
| 41 | NA-W83-256 | N/P | P/C | P/C | MS-T* |
| 42 | NA-W81-162-W | P | P | C | I |
| 43 | IL83-7439 | N/P | P | C/P | I-T* |
| 44 | IL80-1251 | N | P | P | T |
| 45 | TX87HA1 | P | P | P | T |

^aC, P, and N = complete, partial, and no staining of root tips, respectively.

^bVS = very susceptible, MS = moderately susceptible, I = intermediate and T = tolerant (≤ 0.72 mM Al); * = heterogeneous response; predominant stain intensity listed first for each Al concentration.

1988
Northern Regional Performance Nursery

| <u>Entry No.</u> | <u>Variety or Pedigree</u> | <u>Sel. No.</u> | <u>Source</u> |
|------------------|---|-----------------|---------------|
| 1** | Kharkof | CI1442 | Check |
| 2** | Roughrider | CI17439 | " |
| 3** | Colt | PI476975 | " |
| 4 | CI15322//Agate/4*Scout 66/3/Ctk 78/4/SD74221 | SD82144 | So. Dakota |
| 5 | CI15322//3*(Agent/4*Scout66) | SD76463-16 | " |
| 6 | SD74221*2/Lathrop | SD82114 | " |
| 7 | SD76109/Rose | SD78207-4 | " |
| 8 | SD76669*2/KS71591 | SD791231 | " |
| 9 | Rrr//Yogo/Trapper | ND8212 | No. Dakota |
| 10 | Rrr/3/Froid//Winoka/WW8 | ND8215 | " |
| 11 | Rrr*2/1809 | ND8286 | " |
| 12 | Ctk/3/Froid*2//ND363/ND269 | ND8407 | " |
| 13* | Rrr/F0.1527 | ND8460 | " |
| 14 | Brule/3/Parker*4/Agent//Belot.198/Lcr | NE82656 | Nebraska |
| 15 | HiPlains/Wings/3/Pkr*4/Agent//Belot.198/Lcr | NE82438 | " |
| 16* | (FTN/MI/Hope)//Pnc/2*Cnn/3/Pnc/3*Cnn/4/ Pnc/2*Cnn//ILL#1-Cns-TTi (CTMH)/ Sando60/5/Vona/6/Wrr*5/Agent//Kavkaz | NE83432 | " |
| 17* | Bez 1/Ctk78//Arthur/Ctk78/3/Bennett | NE84581 | " |
| 18 | OK11252A/W76-1226 (Abilene) | NA-81-362-5 | NAPB |
| 19* | Winter Wheat Hybrid | XH947 | HybriTech |
| 20* | " " | XNH1354 | " |
| 21 | Kharkov 22 MC/Bezostaya 1 | WT176 | Lethbridge |
| 22 | Norstar/Rrr | WT177 | " |
| 23 | " | WT179 | " |
| 24 | Turkey/Burt//Bezostaya 1 | ID0180 | " |
| 25* | Hg1/ID5006/4/II-60-156/CI14107//It/3/ 2Cnn/PI178383 | ID0301 | Idaho |
| 26 | Lancota/Froid//NE69559/Wnk | MT8039 | Montana |

* New Entry in 1988

** New Seed Provided

TEST SITE INFORMATION - NRPN

Clovis, NM -- See information for SRPN.

Nebraska stations -- See information for SRPN.

Brookings, SD -- See information for SRPN.

Presho, SD -- See information for SRPN.

Highmore, SD -- Seeded on 9/9/87 into fallowed land with good moisture. A mild winter allowed for 100% survival. April, May, June, and July were extremely hot and dry. Leaf rust was present at 10 to 20% severity on susceptible cultivars. WSMV was present and notes were taken on general plant appearance. Harvested on 7/11/88.

Casselton, ND -- The nursery was planted on 9/9/87. Some winterkill was recorded due to cold temperatures and uneven snow cover. Dry conditions were experienced from planting through harvest with less than 40% of normal precipitation received from April through July.

Carrington, ND -- The nursery was planted on 9/4/87 into standing small grain stubble. Along with some winterkill, there was severe drought during the growing season. The average yield at this location was 6 bu/a.

Williston, ND -- All varieties had 100% fall stand establishment and no winterkill. There were no disease, weed, or insect problems. The drought severely affected yields. There were 21 days in June with maximum daily temperatures 90 degrees or above. Two inches of the total June rainfall of 3.02 inches was received on June 30 and did very little to enhance grain production. June was the only month in which rains of greater than 0.33 inches occurred.

Rosemount, MN -- Planted on 9/9/87 and harvested 7/8/88. Plots were variable due to severe drought and heat and a spotty fall infection of BYDV. There was no winterkill. Heat pushed grain fill very fast and little moisture was available in June (0.22 inches). Temperatures were near or over record highs on many days with relatively low humidity. No other diseases were noted.

Waseca, MN -- Planted on 9/8/87 and harvested 7/6/88. There was less BYDV infection than at Rosemount and it was scattered and not severe. More precipitation was received but temperatures were just as severe when compared to Rosemount.

Sheridan, WY -- The nursery was seeded into a tilled seed bed and no fertilizer was applied. The soft ground resulted in sliding of the wheel driving the seed distributor. An inadequate stand resulted in three plots. Below normal precipitation dramatically affected yields. No insect or disease problems were noted.

Archer, WY -- The nursery was planted into a no-till chemical fallow area with a no-till plot drill. Fertilizer at 40-20-0 lbs/a rate was deep band applied at planting time. Very little moisture was received throughout the fall which affected emergence and stand establishment. The moisture received throughout the spring and summer was above average and timely. Temperatures were above normal beginning in early June and remained high until harvest. There was no insect or disease damage to the nursery. The Russian wheat aphid, which caused extensive damage the previous year, was not a problem.

Moccasin, MT -- All entries survived the winter with excellent stands. Cool moist conditions during April and the first two weeks of May produced succulent growth. Drought stress from May 15 through June 15 with high temperatures and strong south winds significantly reduced yields. Powdery mildew was the only disease or insect problem observed this year. Russian wheat aphids and green bugs arrived too late to affect small grain yields.

Sidney, MT -- Diseases and insects were not a problem. There was good soil moisture to a depth of 18 inches at planting time, resulting in good emergence and stand establishment. Winter survival was excellent. Persistent hot, dry, and windy conditions throughout the spring and summer growing periods reduced tillering, plant height, and yields drastically. Protein levels of harvested grain were very high due to the drought. Maturity was 2-3 weeks ahead of normal. A total of 6.18 inches of precipitation was received during the growing season compared to the long term average of 13.53 inches.

Bozeman, MT -- No information.

Idaho stations -- See information for SRPN.

Lind, WA -- See information for SRPN.

Table 13. Yield and agronomic data for entries in the 1988
Northern Regional Performance Nursery.

CLOVIS (IRR.)

NEW MEXICO

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1 : | : LEAF RUST : : SEV.:RESP : : % : 0-9 : |
|---------------------|------------------------|------------------------|---------------------------------------|-----------------------------------|--|---|
| MT8039 | 26 | 4643 | 65.3 | 90 | 134 | 30 |
| XNH1354 | 20 | 4641 | 67.5 | 81 | 139 | 27 |
| XH947 | 19 | 4528 | 65.6 | 80 | 137 | 9 |
| SD82114 | 6 | 4510 | 67.9 | 92 | 137 | 10 |
| PI476975 | 3 | 4439 | 67.3 | 72 | 137 | 27 |
| NE83432 | 16 | 4125 | 68.1 | 77 | 139 | 11 |
| NA-81-362-5 | 18 | 4114 | 69.2 | 74 | 137 | 9 |
| NE82656 | 14 | 3990 | 66.5 | 78 | 137 | 7 |
| ID0301 | 25 | 3927 | 64.6 | 89 | 144 | 20 |
| NE82438 | 15 | 3784 | 66.5 | 79 | 139 | 13 |
| SD82144 | 4 | 3761 | 64.5 | 86 | 138 | 15 |
| SD76463-16 | 5 | 3480 | 67.9 | 94 | 140 | 8 |
| ND8286 | 11 | 3447 | 67.9 | 91 | 141 | 15 |
| NE84581 | 17 | 3393 | 68.2 | 80 | 142 | 1 |
| ND8215 | 10 | 3363 | 71.4 | 98 | 143 | 5 |
| ND8407 | 12 | 3207 | 66.9 | 96 | 139 | 5 |
| ND8212 | 9 | 3127 | 69 | 93 | 144 | 27 |
| CI17439 | 2 | 2800 | 68.8 | 91 | 144 | 17 |
| SD791231 | 8 | 2685 | 69.9 | 87 | 139 | 4 |
| ID0180 | 24 | 2653 | 64.5 | 88 | 145 | 14 |
| SD78207-4 | 7 | 2488 | 68.5 | 94 | 144 | 4 |
| WT176 | 21 | 2449 | 68.7 | 98 | 144 | 8 |
| WT179 | 23 | 2386 | 67 | 97 | 145 | 10 |
| CI1442 | 1 | 2317 | 69.7 | 102 | 144 | 10 |
| WT177 | 22 | 2110 | 69.8 | 98 | 144 | 12 |
| ND8460 | 13 | 1845 | 69.1 | 97 | 144 | 2 |

| | |
|----------|------|
| MEAN | 3393 |
| LSD(.05) | 930 |
| C.V. | 16.7 |

CLOVIS (DRYL.)

NEW MEXICO

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD KG/HA | : VOLUME WEIGHT KG/HL | : PLANT HEIGHT CM | : DAYS TO HEADING FROM 1/1: | : LEAF RUST: SEV.:RESP: % : 0-9: |
|---------------------|--------------------|---------------------|--------------------------------|----------------------------|--------------------------------------|---|
| NE84581 | 17 | 2276 | 64.4 | 63 | 134 | 1 |
| ID0301 | 25 | 2216 | 68.4 | 60 | 137 | 9 |
| SD82114 | 6 | 2121 | 66.4 | 59 | 134 | 1 |
| XNH1354 | 20 | 2088 | 66.6 | 59 | 137 | 18 |
| XH947 | 19 | 2060 | 65.9 | 54 | 134 | 7 |
| ND8215 | 10 | 2023 | 62.8 | 66 | 138 | 1 |
| SD76463-16 | 5 | 1893 | 66.7 | 61 | 134 | 2 |
| NE82656 | 14 | 1874 | 65.6 | 62 | 134 | 2 |
| CI1442 | 1 | 1850 | 64.3 | 76 | 137 | 15 |
| PI476975 | 3 | 1745 | 67.3 | 56 | 134 | 5 |
| NA-81-362-5 | 18 | 1735 | 72.2 | 55 | 134 | 1 |
| ND8286 | 11 | 1709 | 64.1 | 63 | 137 | 2 |
| ND8212 | 9 | 1688 | 61.6 | 65 | 138 | 17 |
| SD78207-4 | 7 | 1635 | 62.7 | 61 | 137 | 2 |
| NE83432 | 16 | 1621 | 66.4 | 55 | 137 | 2 |
| CI17439 | 2 | 1554 | 63.8 | 63 | 137 | 4 |
| SD82144 | 4 | 1548 | 64.5 | 60 | 134 | 2 |
| ND8407 | 12 | 1465 | 64.7 | 65 | 137 | 2 |
| MT8039 | 26 | 1446 | 59.4 | 63 | 134 | 10 |
| WT176 | 21 | 1426 | 62.2 | 62 | 144 | 4 |
| ID0180 | 24 | 1419 | 59.9 | 57 | 144 | 14 |
| SD791231 | 8 | 1376 | 63.4 | 64 | 136 | 5 |
| NE82438 | 15 | 1300 | 59.6 | 54 | 137 | 1 |
| ND8460 | 13 | 1298 | 62.5 | 68 | 137 | 2 |
| WT179 | 23 | 1237 | 63.6 | 65 | 144 | 2 |
| WT177 | 22 | 963 | 63.1 | 59 | 144 | 2 |
| MEAN | | 1676 | | | | |
| LSD(.05) | | N.S. | | | | |
| C.V. | | 27.5 | | | | |

LINCOLN
NEBRASKA
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD KG/HA | : VOLUME WEIGHT KG/HL | : PLANT HEIGHT CM | : DAYS TO HEADING FROM 1/1 | : LEAF RUST: SEV.: % | : RESP: 0-9: |
|---------------------|--------------------|---------------------|--------------------------------|----------------------------|-------------------------------------|-------------------------------|--------------------|
| NA-81-362-5 | 18 | 4282 | 81.1 | 72 | 138 | | 8 |
| XH947 | 19 | 3867 | 77.8 | 80 | 138 | | 8 |
| NE83432 | 16 | 3728 | 77.5 | 80 | 141 | | 3 |
| NE84581 | 17 | 3596 | 78.3 | 80 | 142 | | 5 |
| NE82656 | 14 | 3374 | 78.7 | 80 | 139 | | 2 |
| PI476975 | 3 | 3356 | 78.8 | 70 | 138 | | 8 |
| SD82114 | 6 | 3347 | 81.5 | 91 | 139 | | 7 |
| SD82144 | 4 | 3302 | 82.4 | 93 | 139 | | 8 |
| SD76463-16 | 5 | 3297 | 78.4 | 91 | 140 | | 8 |
| ND8215 | 10 | 3266 | 76.1 | 96 | 143 | | 8 |
| NE82438 | 15 | 3241 | 78.4 | 78 | 139 | | 8 |
| XNH1354 | 20 | 3232 | 75.7 | 78 | 140 | | 8 |
| MT8039 | 26 | 3141 | 76.6 | 86 | 139 | | 8 |
| ND8407 | 12 | 3089 | 78.7 | 96 | 141 | | 5 |
| SD791231 | 8 | 2955 | 80.1 | 84 | 140 | | 2 |
| SD78207-4 | 7 | 2930 | 79.2 | 86 | 141 | | 2 |
| ND8460 | 13 | 2878 | 79.6 | 97 | 143 | | 8 |
| ND8286 | 11 | 2867 | 76.6 | 87 | 142 | | 8 |
| CI1442 | 1 | 2573 | 79.5 | 94 | 141 | | 5 |
| CI17439 | 2 | 2486 | 77.3 | 92 | 144 | | 8 |
| WT179 | 23 | 2441 | 77 | 90 | 144 | | 7 |
| ID0180 | 24 | 2345 | 78.6 | 75 | 142 | | 5 |
| WT176 | 21 | 2291 | 77.8 | 91 | 144 | | 2 |
| ID0301 | 25 | 2262 | 76.1 | 75 | 141 | | 7 |
| ND8212 | 9 | 2235 | 73.8 | 88 | 142 | | 8 |
| WT177 | 22 | 2215 | 77.5 | 91 | 143 | | 8 |
| MEAN | | 3023 | | | | | |
| LSD(.05) | | 489 | | | | | |
| C.V. | | 9.9 | | | | | |

NORTH PLATTE
NEBRASKA
THREE REPLICATIONS

| C.I. OR SEL. NO. | : :ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : |
|---------------------|-------------------------|------------------------|---------------------------------------|
| NE84581 | 17 | 2873 | 69.3 |
| NE82656 | 14 | 2798 | 67 |
| XH947 | 19 | 2675 | 62.7 |
| SD76463-16 | 5 | 2496 | 67.1 |
| NA-81-362-5 | 18 | 2486 | 67.2 |
| SD78207-4 | 7 | 2443 | 70.7 |
| SD82114 | 6 | 2428 | 69 |
| MT8039 | 26 | 2369 | 66.4 |
| ND8460 | 13 | 2307 | 69.4 |
| NE82438 | 15 | 2255 | 64 |
| SD791231 | 8 | 2232 | 67.6 |
| CI17439 | 2 | 2208 | 68.1 |
| ND8286 | 11 | 2184 | 65.3 |
| SD82144 | 4 | 2158 | 68.1 |
| ND8407 | 12 | 2118 | 65.4 |
| XNH1354 | 20 | 2095 | 64.1 |
| NE83432 | 16 | 2085 | 65.8 |
| CI1442 | 1 | 2066 | 68.9 |
| ND8212 | 9 | 2059 | 64 |
| PI476975 | 3 | 1973 | 64 |
| WT177 | 22 | 1961 | 68.9 |
| ND8215 | 10 | 1827 | 60.9 |
| WT176 | 21 | 1788 | 63.7 |
| WT179 | 23 | 1723 | 67.1 |
| ID0301 | 25 | 1705 | 63.5 |
| ID0180 | 24 | 1671 | 64 |
| <hr/> | | | |
| MEAN | | 2192 | |
| LSD(.05) | | 403 | |
| C.V. | | 11.2 | |

ALLIANCE
NEBRASKA
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : |
|---------------------|------------------------|------------------------|---------------------------------------|
| NA-81-362-5 | 18 | 4364 | 77.4 |
| NE83432 | 16 | 4163 | 75.3 |
| XNH1354 | 20 | 4031 | 74.7 |
| NE82438 | 15 | 4002 | 72.9 |
| XH947 | 19 | 3982 | 72.6 |
| MT8039 | 26 | 3977 | . |
| ID0301 | 25 | 3948 | 72.2 |
| CI17439 | 2 | 3827 | 76.2 |
| NE84581 | 17 | 3773 | 74.8 |
| SD791231 | 8 | 3707 | 74.2 |
| NE82656 | 14 | 3682 | 74.9 |
| ND8212 | 9 | 3600 | 72.6 |
| ND8215 | 10 | 3588 | 71.2 |
| WT176 | 21 | 3472 | 71 |
| ID0180 | 24 | 3412 | 73.9 |
| ND8286 | 11 | 3353 | 74.9 |
| ND8407 | 12 | 3341 | 74 |
| SD82144 | 4 | 3339 | 76.6 |
| PI476975 | 3 | 3335 | 74.8 |
| SD82114 | 6 | 3082 | 77.4 |
| SD76463-16 | 5 | 3057 | 77.5 |
| SD78207-4 | 7 | 3055 | 76.1 |
| WT177 | 22 | 3026 | 73.5 |
| ND8460 | 13 | 2999 | 77.4 |
| CI1442 | 1 | 2961 | 73.5 |
| WT179 | 23 | 2863 | 74.8 |
| MEAN | | 3536 | |
| LSD(.05) | | 650 | |
| C.V. | | 11.2 | |

BROOKINGS

S. DAKOTA

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : - PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1: |
|---------------------|------------------------|------------------------|---------------------------------------|-------------------------------------|---|
| NA-81-362-5 | 18 | 2836 | 79.5 | 63 | 150 |
| NE82438 | 15 | 2526 | 78.2 | 65 | 151 |
| SD76598-7 | 28 | 2508 | 77.5 | 69 | 151 |
| SD76463-4 | 29 | 2397 | 78.8 | 74 | 150 |
| NE83432 | 16 | 2307 | 78.2 | 69 | 152 |
| ND8407 | 12 | 2293 | 73.1 | 71 | 151 |
| SD76463-16 | 5 | 2282 | 77.1 | 78 | 150 |
| NE84581 | 17 | 2275 | 76.4 | 68 | 151 |
| NE82656 | 14 | 2180 | 77.3 | 68 | 151 |
| WT177 | 22 | 2137 | 74.9 | 80 | 153 |
| ND8215 | 10 | 2119 | 69.3 | 71 | 152 |
| PI476975 | 3 | 2106 | 76.2 | 62 | 150 |
| ROSE | 30 | 2075 | 75.1 | 69 | 151 |
| SD82102 | 27 | 2054 | 75.5 | 72 | 150 |
| XH947 | 19 | 2044 | 77.5 | 61 | 150 |
| SD82114 | 6 | 2042 | 74.8 | 72 | 151 |
| SD82144 | 4 | 1951 | 73.1 | 73 | 151 |
| ND8286 | 11 | 1925 | 76.4 | 69 | 152 |
| CI17439 | 2 | 1865 | 72.9 | 78 | 152 |
| XNH1354 | 20 | 1853 | 75.9 | 67 | 152 |
| WT179 | 23 | 1750 | 73.9 | 77 | 154 |
| CI1442 | 1 | 1717 | 71.5 | 80 | 153 |
| ND8460 | 13 | 1679 | 75.1 | 78 | 154 |
| SD78207-4 | 7 | 1678 | 77.9 | 67 | 152 |
| SD791231 | 8 | 1662 | 77.1 | 63 | 153 |
| ND8212 | 9 | 1657 | 54 | 77 | 153 |
| MT8039 | 26 | 1617 | 73.3 | 69 | 151 |
| WT176 | 21 | 1558 | 70 | 75 | 154 |
| IDO180 | 24 | 1244 | 60.4 | 69 | 155 |
| IDO301 | 25 | 864 | 62 | 69 | 155 |

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| MEAN | 1973 |
| LSD(.05) | 641 |
| C.V. | 19.9 |

PRESHO
S. DAKOTA
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1: | : GENERAL : : DISEASE : : 0-3 : |
|---------------------|------------------------|------------------------|---------------------------------------|-----------------------------------|---|---------------------------------------|
| NE82656 | 14 | 1996 | 66.8 | 63 | 150 | 2 |
| NE83432 | 16 | 1920 | 67.7 | 57 | 150 | 2 |
| SD76463-4 | 29 | 1791 | 68 | 64 | 151 | 2 |
| NE84581 | 17 | 1786 | 63.7 | 54 | 151 | 2 |
| XNH1354 | 20 | 1755 | 67.8 | 59 | 151 | 2 |
| NA-81-362-5 | 18 | 1730 | 70 | 53 | 149 | 2 |
| SD82102 | 27 | 1572 | 64.4 | 62 | 151 | 2 |
| MT8039 | 26 | 1563 | 61.8 | 64 | 150 | 2 |
| ID0301 | 25 | 1558 | 65.8 | 62 | 152 | 2 |
| SD76463-16 | 5 | 1539 | 67.7 | 66 | 150 | 2 |
| NE82438 | 15 | 1539 | 63.1 | 54 | 151 | 2 |
| XH947 | 19 | 1537 | 64.8 | 60 | 150 | 2 |
| WT176 | 21 | 1532 | 66.2 | 67 | 154 | 2 |
| PI476975 | 3 | 1450 | 66.6 | 58 | 151 | 2 |
| ND8407 | 12 | 1424 | 64.4 | 64 | 151 | 2 |
| SD76598-7 | 28 | 1377 | 63.7 | 62 | 151 | 2 |
| SD791231 | 8 | 1332 | 66.8 | 63 | 151 | 2 |
| CI1442 | 1 | 1316 | 67.5 | 73 | 154 | 2 |
| ROSE | 30 | 1295 | 63.3 | 65 | 152 | 2 |
| SD82144 | 4 | 1253 | 65.7 | 63 | 150 | 2 |
| SD82114 | 6 | 1239 | 64 | 60 | 151 | 3 |
| ND8212 | 9 | 1168 | 61.5 | 61 | 154 | 3 |
| ND8215 | 10 | 1115 | 56.2 | 68 | 154 | 2 |
| SD78207-4 | 7 | 1037 | 62.8 | 54 | 151 | 3 |
| ND8286 | 11 | 1006 | 62.4 | 58 | 154 | 3 |
| WT179 | 23 | 976 | 63.3 | 58 | 155 | 2 |
| ID0180 | 24 | 911 | 61.1 | 54 | 156 | 2 |
| ND8460 | 13 | 878 | 63.8 | 69 | 154 | 3 |
| WT177 | 22 | 835 | 63.3 | 62 | 155 | 2 |
| CI17439 | 2 | 661 | 61.7 | 63 | 154 | 3 |

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| MEAN | 1370 |
| LSD(.05) | 456 |
| C.V. | 20.4 |

HIGHMORE

S. DAKOTA

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1: | : GENERAL : : DISEASE : : 0-3 : |
|---------------------|------------------------|------------------------|---------------------------------------|-----------------------------------|---|---------------------------------------|
| NA-81-362-5 | 18 | 2623 | 73.7 | 62 | 150 | 2 |
| NE82656 | 14 | 2588 | 70.2 | 69 | 150 | 2 |
| NE83432 | 16 | 2354 | 71.5 | 64 | 151 | 2 |
| NE84581 | 17 | 2296 | 69.1 | 69 | 151 | 3 |
| SD76463-4 | 29 | 2250 | 72.4 | 76 | 151 | 3 |
| SD76598-7 | 28 | 2247 | 70.2 | 74 | 151 | 3 |
| SD76463-16 | 5 | 2190 | 72.2 | 76 | 152 | 2 |
| NE82438 | 15 | 2189 | 69.3 | 69 | 151 | 2 |
| XH947 | 19 | 2004 | 69.7 | 64 | 151 | 3 |
| SD82114 | 6 | 1959 | 70.2 | 74 | 152 | 2 |
| SD82102 | 27 | 1901 | 67.3 | 69 | 152 | 3 |
| MT8039 | 26 | 1806 | 65.5 | 73 | 152 | 3 |
| ND8407 | 12 | 1759 | 68.2 | 83 | 154 | 2 |
| PI476975 | 3 | 1752 | 69.8 | 64 | 151 | 3 |
| SD82144 | 4 | 1728 | 69.8 | 72 | 151 | 3 |
| ROSE | 30 | 1714 | 67.7 | 64 | 152 | 3 |
| ND8286 | 11 | 1669 | 66.9 | 71 | 152 | 3 |
| XNH1354 | 20 | 1665 | 67.3 | 69 | 153 | 3 |
| SD791231 | 8 | 1657 | 70.4 | 75 | 153 | 2 |
| ND8460 | 13 | 1533 | 67.3 | 81 | 154 | 3 |
| ND8215 | 10 | 1522 | 62.9 | 79 | 156 | 2 |
| CI1442 | 1 | 1465 | 70.2 | 83 | 156 | 3 |
| ND8212 | 9 | 1396 | 63.7 | 77 | 155 | 3 |
| SD78207-4 | 7 | 1351 | 68.4 | 68 | 152 | 3 |
| IDO301 | 25 | 1210 | 65.7 | 72 | 153 | 3 |
| CI17439 | 2 | 1121 | 67.3 | 69 | 156 | 3 |
| WT179 | 23 | 1105 | 66.8 | 69 | 156 | 3 |
| IDO180 | 24 | 1090 | 63.8 | 68 | 155 | 3 |
| WT176 | 21 | 1074 | 64 | 78 | 154 | 2 |
| WT177 | 22 | 855 | 66.9 | 65 | 156 | 3 |

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| MEAN | 1736 |
| LSD(.05) | 442 |
| C.V. | 15.6 |

CASSELTON

N. DAKOTA

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD KG/HA | : VOLUME KG/HL | : PLANT HEIGHT CM | : DAYS TO HEADING FROM 1/1: | : WINTER SURVIVAL % |
|---------------------|--------------------|---------------------|----------------------|----------------------------|--------------------------------------|------------------------------|
| NE82438 | 15 | 1806 | 78.3 | 59 | 156 | 85 |
| ND8212 | 9 | 1740 | 75.2 | 71 | 158 | 95 |
| WT177 | 22 | 1691 | 74.4 | 73 | 159 | 65 |
| ND8286 | 11 | 1689 | 78.3 | 71 | 158 | 97 |
| XNH1354 | 20 | 1675 | 78.4 | 62 | 157 | 73 |
| CI17439 | 2 | 1622 | 77.8 | 68 | 158 | 97 |
| ND8407 | 12 | 1563 | 77.5 | 64 | 158 | 87 |
| PI476975 | 3 | 1507 | 76.6 | 49 | 156 | 63 |
| SD82144 | 4 | 1502 | 76 | 68 | 156 | 90 |
| ND8215 | 10 | 1497 | 74.7 | 69 | 160 | 68 |
| ND8460 | 13 | 1486 | 78.7 | 66 | 159 | 77 |
| NE83432 | 16 | 1409 | 77.5 | 59 | 155 | 80 |
| NE82656 | 14 | 1388 | 77.8 | 65 | 155 | 80 |
| SD82114 | 6 | 1300 | 78.3 | 60 | 156 | 73 |
| SD78207-4 | 7 | 1295 | 77.5 | 67 | 157 | 85 |
| NORSTAR | 29 | 1231 | 77.8 | 86 | 162 | 92 |
| NE84581 | 17 | 1212 | 75.7 | 53 | 156 | 60 |
| SEWARD | 28 | 1192 | 76.8 | 70 | 159 | 60 |
| SD76463-16 | 5 | 1122 | 75.5 | 66 | 157 | 63 |
| SD791231 | 8 | 1107 | 77.8 | 65 | 158 | 80 |
| XH696 | 27 | 1106 | 76.4 | 61 | 157 | 40 |
| WT179 | 23 | 1068 | 73.8 | 67 | 161 | 65 |
| CI1442 | 1 | 1056 | 76.4 | 73 | 160 | 58 |
| NA-81-362-5 | 18 | 1025 | 80.5 | 51 | 156 | 37 |
| NORWIN | 30 | 1022 | 76.6 | 60 | 159 | 62 |
| WT176 | 21 | 921 | 76 | 72 | 161 | 55 |
| ID0180 | 24 | 645 | 75.7 | 58 | 162 | 33 |
| ID0301 | 25 | 554 | 73.7 | 55 | 161 | 30 |
| MT8039 | 26 | 400 | 71.3 | 65 | 160 | 17 |
| XH947 | 19 | 381 | 75.1 | 66 | 157 | 18 |

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|----------|------|
| MEAN | 1240 |
| LSD(.05) | 642 |
| C.V. | 31.7 |

CARRINGTON

N. DAKOTA

THREE REPLICATIONS

| C.I. OR SEL. NO. | : :ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1: | : WINTER : : SURVIVAL : : % : |
|---------------------|-------------------------|------------------------|---------------------------------------|-----------------------------------|---|-------------------------------------|
| NE82438 | 15 | 884 | 71.9 | 44 | 156 | 100 |
| ID0180 | 24 | 836 | 71.9 | 44 | 160 | 98 |
| ND8286 | 11 | 823 | 69.7 | 50 | 158 | 100 |
| WT179 | 23 | 800 | 69 | 49 | 159 | 100 |
| CI1442 | 1 | 794 | 74.4 | 55 | 157 | 93 |
| NE83432 | 16 | 728 | 71.3 | 43 | 156 | 93 |
| ND8215 | 10 | 719 | 67.7 | 45 | 158 | 100 |
| NE82656 | 14 | 699 | 72.4 | 45 | 156 | 98 |
| WT176 | 21 | 674 | 70.3 | 49 | 159 | 98 |
| WT177 | 22 | 663 | 68 | 45 | 158 | 100 |
| XH696 | 27 | 641 | 73.1 | 43 | 156 | 95 |
| MT8039 | 26 | 632 | 73 | 48 | 158 | 93 |
| SD76463-16 | 5 | 621 | 74 | 47 | 158 | 88 |
| ND8212 | 9 | 598 | 68.6 | 45 | 158 | 93 |
| NE84581 | 17 | 583 | 69.9 | 44 | 158 | 98 |
| ND8407 | 12 | 569 | 71.2 | 46 | 159 | 100 |
| ID0301 | 25 | 569 | 71.5 | 45 | 160 | 78 |
| CI17439 | 2 | 513 | 70.2 | 46 | 158 | 100 |
| NORSTAR | 29 | 500 | 73.9 | 47 | 162 | 97 |
| SEWARD | 28 | 483 | 72.6 | 43 | 159 | 97 |
| NA-81-362-5 | 18 | 467 | 76.5 | 35 | 156 | 88 |
| XH947 | 19 | 444 | 72.8 | 44 | 157 | 98 |
| SD78207-4 | 7 | 422 | 71.7 | 41 | 158 | 95 |
| SD82114 | 6 | 393 | 73.9 | 40 | 157 | 88 |
| XNH1354 | 20 | 390 | 75.3 | 43 | 159 | 87 |
| NORWIN | 30 | 344 | 73 | 32 | 161 | 93 |
| PI476975 | 3 | 340 | 73.7 | 35 | 156 | 85 |
| ND8460 | 13 | 309 | 74.2 | 41 | 160 | 72 |
| SD82144 | 4 | 240 | 73.1 | 37 | 157 | 93 |
| SD791231 | 8 | 211 | 73.8 | 38 | 160 | 80 |

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| MEAN | 563 |
| LSD(.05) | 288 |
| C.V. | 31.4 |

WILLISTON

N. DAKOTA

FOUR REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD KG/HA | : VOLUME WEIGHT KG/HL | : PLANT HEIGHT CM | : DAYS TO HEADING FROM 1/1: |
|---------------------|--------------------|---------------------|--------------------------------|----------------------------|--------------------------------------|
| NA-81-362-5 | 18 | 778 | 67.9 | 40 | 147 |
| NE84581 | 17 | 730 | 67.3 | 40 | 148 |
| SD76463-16 | 5 | 718 | 68.6 | 46 | 147 |
| NE83432 | 16 | 678 | 70.3 | 43 | 148 |
| PI476975 | 3 | 666 | 69.1 | 42 | 147 |
| ID0301 | 25 | 636 | 72.8 | 41 | 151 |
| XNH1354 | 20 | 629 | 71.3 | 46 | 148 |
| SD82114 | 6 | 620 | 68.6 | 45 | 148 |
| NE82656 | 14 | 620 | 68.2 | 44 | 147 |
| NE82438 | 15 | 619 | 70 | 37 | 149 |
| SD791231 | 8 | 602 | 70.4 | 41 | 149 |
| ND8286 | 11 | 602 | 69.7 | 45 | 151 |
| ND8460 | 13 | 558 | 67.9 | 47 | 150 |
| ID0180 | 24 | 555 | 69.1 | 43 | 151 |
| XH947 | 19 | 543 | 67.6 | 45 | 147 |
| SD78207-4 | 7 | 536 | 71 | 41 | 150 |
| ND8215 | 10 | 536 | 63.5 | 48 | 151 |
| ND8212 | 9 | 535 | 65 | 45 | 151 |
| ND8407 | 12 | 530 | 65 | 47 | 150 |
| CI17439 | 2 | 523 | 68.1 | 49 | 151 |
| SD82144 | 4 | 518 | 70.7 | 43 | 148 |
| CI1442 | 1 | 484 | 69.8 | 48 | 151 |
| MT8039 | 26 | 483 | 68.6 | 43 | 148 |
| AGASSIZ | 28 | 474 | 68.8 | 46 | 152 |
| WT179 | 23 | 440 | 68.8 | 42 | 153 |
| WT176 | 21 | 410 | 72.6 | 46 | 152 |
| WT177 | 22 | 409 | 68.4 | 44 | 152 |
| NORSTAR | 27 | 341 | 70 | 45 | 154 |

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| MEAN | 563 |
| LSD(.05) | 57 |
| C.V. | 7.1 |

ROSEMOUNT

MINNESOTA

THREE REPLICATIONS

| C.I. OR SEL. NO. | : : NO. : | : YIELD : KG/HA : | : VOLUME : KG/HL : | : PLANT : HEIGHT : : CM : | : DAYS TO : FROM 1/1: | : LODGING : 0-9 : | : BYD : 0-9 : | : |
|---------------------|--------------|----------------------|-----------------------|---------------------------------|--------------------------|----------------------|------------------|---|
| MT8039 | 26 | 2661 | 71 | 88 | 150 | 0 | 2 | |
| SD82114 | 6 | 2130 | 73.5 | 88 | 150 | 0 | 2 | |
| NE84581 | 17 | 2116 | 74.2 | 85 | 152 | 0 | 2 | |
| PI476975 | 3 | 2087 | 71 | 73 | 149 | 0 | 2 | |
| CI17439 | 2 | 2065 | 77.4 | 99 | 153 | 0 | 1 | |
| NA-81-362-5 | 18 | 1995 | 72.9 | 74 | 149 | 0 | 2 | |
| NE83432 | 16 | 1977 | 72.9 | 81 | 151 | 1 | 4 | |
| ND8286 | 11 | 1964 | 74.8 | 94 | 154 | 0 | 1 | |
| SD76463-16 | 5 | 1948 | 76.1 | 97 | 151 | 0 | 2 | |
| NE82438 | 15 | 1948 | 68.4 | 83 | 153 | 0 | 2 | |
| SD78207-4 | 7 | 1946 | 72.9 | 89 | 152 | 0 | 3 | |
| ND8212 | 9 | 1890 | 68.4 | 95 | 154 | 0 | 2 | |
| XNH1354 | 20 | 1825 | 72.2 | 81 | 153 | 0 | 6 | |
| SD791231 | 8 | 1787 | 74.2 | 92 | 151 | 0 | 4 | |
| ND8215 | 10 | 1784 | 67.7 | 99 | 154 | 0 | 2 | |
| NE82656 | 14 | 1737 | 68.4 | 86 | 150 | 0 | 3 | |
| CI1442 | 1 | 1618 | 74.2 | 92 | 153 | 0 | 3 | |
| SD82144 | 4 | 1616 | 71 | 93 | 149 | 0 | 2 | |
| ID0301 | 25 | 1556 | 72.2 | 68 | 154 | 0 | 7 | |
| WT177 | 22 | 1515 | 74.8 | 94 | 154 | 0 | 2 | |
| ID0180 | 24 | 1509 | 71.6 | 83 | 155 | 0 | 3 | |
| ND8407 | 12 | 1417 | 71 | 93 | 153 | 4 | 1 | |
| XH947 | 19 | 1365 | 67.7 | 86 | 150 | 0 | 2 | |
| WT179 | 23 | 1309 | 72.2 | 89 | 155 | 0 | 2 | |
| ND8460 | 13 | 1302 | 72.2 | 97 | 153 | 0 | 2 | |
| WT176 | 21 | 1197 | 67.7 | 90 | 156 | 0 | 2 | |

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| MEAN | 1779 |
| LSD(.05) | N.S. |
| C.V. | 30.3 |

WASECA
MINNESOTA
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD KG/HA | : VOLUME WEIGHT KG/HL | : PLANT HEIGHT CM | : DAYS TO HEADING FROM 1/1: |
|---------------------|--------------------|---------------------|--------------------------------|----------------------------|--------------------------------------|
| NE83432 | 16 | 2846 | 80 | 58 | 154 |
| ND8407 | 12 | 2740 | 78 | 74 | 155 |
| SD82114 | 6 | 2718 | 79.3 | 64 | 154 |
| ND8212 | 9 | 2604 | 77.4 | 73 | 155 |
| NA-81-362-5 | 18 | 2581 | 80.6 | 64 | 153 |
| ND8215 | 10 | 2568 | 76.1 | 73 | 155 |
| NE84581 | 17 | 2435 | 78.7 | 63 | 155 |
| WT179 | 23 | 2344 | 77.4 | 75 | 155 |
| SD76463-16 | 5 | 2258 | 80 | 72 | 153 |
| WT177 | 22 | 2252 | 79.3 | 71 | 154 |
| NE82438 | 15 | 2231 | 78.7 | 63 | 154 |
| SD78207-4 | 7 | 2179 | 80.6 | 67 | 154 |
| ID0180 | 24 | 2101 | 76.1 | 63 | 157 |
| CI17439 | 2 | 2060 | 79.3 | 75 | 154 |
| ND8286 | 11 | 1974 | 78.7 | 69 | 156 |
| MT8039 | 26 | 1939 | 76.1 | 64 | 155 |
| WT176 | 21 | 1842 | 75.5 | 70 | 156 |
| CI1442 | 1 | 1822 | 79.3 | 75 | 153 |
| XNH1354 | 20 | 1769 | 78.7 | 53 | 154 |
| SD791231 | 8 | 1751 | 78.7 | 60 | 153 |
| NE82656 | 14 | 1712 | 77.4 | 62 | 153 |
| ND8460 | 13 | 1704 | 79.3 | 69 | 154 |
| SD82144 | 4 | 1695 | 78 | 65 | 153 |
| XH947 | 19 | 1692 | 76.1 | 56 | 156 |
| PI476975 | 3 | 1328 | 78.7 | 49 | 154 |
| ID0301 | 25 | 1275 | 78.7 | 58 | 156 |
| <hr/> | | | | | |
| MEAN | | 2093 | | | |
| LSD(.05) | | 574 | | | |
| C.V. | | 16.7 | | | |

SHERIDAN

WYOMING

THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD KG/HA | : VOLUME WEIGHT KG/HL | : PLANT HEIGHT CM | : DAYS TO HEADING FROM 1/1: |
|---------------------|--------------------|---------------------|--------------------------------|----------------------------|--------------------------------------|
| NA-81-362-5 | 18 | 2009 | 76.3 | 62 | 150 |
| NE83432 | 16 | 1988 | 75.6 | 69 | 151 |
| SD82144 | 4 | 1932 | 72.5 | 80 | 151 |
| NE82656 | 14 | 1849 | 74.2 | 69 | 150 |
| PI476975 | 3 | 1818 | 75.4 | 64 | 150 |
| XNH1354 | 20 | 1757 | 74.6 | 69 | 152 |
| ID0180 | 24 | 1751 | 72.9 | 73 | 155 |
| SD78207-4 | 7 | 1719 | 75.8 | 66 | 153 |
| ID0301 | 25 | 1706 | 73.4 | 63 | 153 |
| MT8039 | 26 | 1701 | 69.5 | 75 | 153 |
| ND8407 | 12 | 1648 | 72.8 | 86 | 153 |
| SD76463-16 | 5 | 1641 | 74.3 | 79 | 151 |
| NE84581 | 17 | 1598 | 73.9 | 73 | 152 |
| NE82438 | 15 | 1549 | 73.2 | 65 | 153 |
| WT176 | 21 | 1473 | 70.6 | 73 | 152 |
| CI17439 | 2 | 1464 | 73.1 | 77 | 153 |
| ND8212 | 9 | 1448 | 71.3 | 78 | 154 |
| CI1442 | 1 | 1426 | 75.1 | 77 | 153 |
| ND8286 | 11 | 1336 | 71.8 | 72 | 153 |
| ND8215 | 10 | 1302 | 70.6 | 75 | 155 |
| SD82114 | 6 | 1251 | 73.7 | 69 | 151 |
| ND8460 | 13 | 1219 | 74.7 | 79 | 154 |
| WT179 | 23 | 1186 | 72.5 | 68 | 155 |
| WT177 | 22 | 1103 | 73.4 | 70 | 155 |
| XH947 | 19 | 1045 | 71.2 | 67 | 150 |
| SD791231 | 8 | 1036 | 73 | 78 | 153 |
| MEAN | | 1537 | | | |
| LSD(.05) | | 566 | | | |
| C.V. | | 22.5 | | | |

ARCHER
WYOMING
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1: |
|---------------------|------------------------|------------------------|---------------------------------------|-----------------------------------|---|
| XNH1354 | 20 | 1950 | 75.1 | 52 | 161 |
| XH947 | 19 | 1930 | 73.2 | 54 | 159 |
| PI476975 | 3 | 1861 | 74.6 | 53 | 159 |
| NE84581 | 17 | 1809 | 75.7 | 53 | 160 |
| SD82144 | 4 | 1775 | 74.9 | 55 | 160 |
| MT8039 | 26 | 1771 | 73.1 | 54 | 161 |
| SD76463-16 | 5 | 1766 | 76.4 | 56 | 160 |
| CI1442 | 1 | 1704 | 76.4 | 60 | 163 |
| ND8286 | 11 | 1681 | 74.4 | 57 | 164 |
| SD82114 | 6 | 1605 | 75.4 | 53 | 161 |
| NE82656 | 14 | 1596 | 74.6 | 64 | 160 |
| NE82438 | 15 | 1578 | 74.9 | 51 | 163 |
| CI17439 | 2 | 1574 | 74.9 | 61 | 163 |
| NE83432 | 16 | 1565 | 76.2 | 52 | 161 |
| SD791231 | 8 | 1527 | 74.6 | 58 | 163 |
| NA-81-362-5 | 18 | 1527 | 76.8 | 49 | 160 |
| ND8407 | 12 | 1511 | 72.6 | 58 | 164 |
| ID0180 | 24 | 1491 | 73.4 | 57 | 164 |
| ND8212 | 9 | 1441 | 72.4 | 52 | 166 |
| ID0301 | 25 | 1428 | 75.5 | 51 | 164 |
| ND8460 | 13 | 1296 | 75.4 | 58 | 164 |
| SD78207-4 | 7 | 1199 | 75.9 | 56 | 163 |
| WT179 | 23 | 1199 | 73.1 | 56 | 166 |
| WT177 | 22 | 1175 | 74 | 56 | 165 |
| WT176 | 21 | 1128 | 72.5 | 55 | 163 |
| ND8215 | 10 | 1098 | 71.5 | 58 | 166 |
| MEAN | | 1546 | | | |
| LSD(.05) | | 422 | | | |
| C.V. | | 16.6 | | | |

MOCCASIN

MONTANA

THREE REPLICATIONS

| C.I. OR SEL. NO. | : :ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1: | : LODGING : : 0-5 : |
|---------------------|-------------------------|------------------------|---------------------------------------|-----------------------------------|---|------------------------|
| XNH1354 | 20 | 2831 | 76.9 | 74 | 158 | 0 |
| NE82656 | 14 | 2809 | 74.7 | 76 | 157 | 1 |
| MT8039 | 26 | 2791 | 71.5 | 82 | 156 | 0 |
| NE84581 | 17 | 2726 | 76.5 | 79 | 158 | 1 |
| IDO180 | 24 | 2712 | 76.2 | 76 | 161 | 1 |
| IDO301 | 25 | 2690 | 76.5 | 70 | 160 | 0 |
| NE82438 | 15 | 2549 | 76.6 | 83 | 158 | 0 |
| NA-81-362-5 | 18 | 2396 | 76.9 | 75 | 156 | 1 |
| SD76463-16 | 5 | 2392 | 78 | 79 | 157 | 3 |
| PI476975 | 3 | 2336 | 74.3 | 63 | 155 | 1 |
| SD82114 | 6 | 2311 | 74 | 78 | 156 | 3 |
| ND8212 | 9 | 2293 | 76.2 | 74 | 161 | 2 |
| ND8286 | 11 | 2291 | 78 | 78 | 161 | 1 |
| NE83432 | 16 | 2271 | 77.4 | 70 | 158 | 1 |
| XH947 | 19 | 2271 | 73.9 | 75 | 156 | 1 |
| SD82144 | 4 | 2174 | 76 | 74 | 157 | 1 |
| CI17439 | 2 | 2085 | 79.5 | 82 | 159 | 2 |
| WT179 | 23 | 2078 | 78.2 | 86 | 161 | 1 |
| WT177 | 22 | 2069 | 79.3 | 82 | 161 | 1 |
| ND8215 | 10 | 2067 | 76.4 | 81 | 160 | 1 |
| SD78207-4 | 7 | 2047 | 79.6 | 75 | 160 | 2 |
| ND8407 | 12 | 2047 | 74.4 | 81 | 160 | 2 |
| CI1442 | 1 | 1991 | 79.6 | 86 | 161 | 3 |
| SD791231 | 8 | 1903 | 78 | 83 | 157 | 2 |
| WT176 | 21 | 1849 | 76 | 85 | 161 | 4 |
| ND8460 | 13 | 1562 | 79.9 | 84 | 161 | 1 |
| MEAN | | 2290 | | | | |
| LSD(.05) | | 427 | | | | |
| C.V. | | 11.4 | | | | |

SIDNEY
MONTANA
FOUR REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD KG/HA | : VOLUME WEIGHT KG/HL | : PLANT HEIGHT CM | : DAYS TO HEADING FROM 1/1: |
|---------------------|--------------------|---------------------|--------------------------------|----------------------------|--------------------------------------|
| NA-81-362-5 | 18 | 767 | 77.1 | 33 | 145 |
| NE82656 | 14 | 763 | 75.2 | 37 | 146 |
| ID0301 | 25 | 748 | 77 | 37 | 150 |
| NE82438 | 15 | 736 | 74.7 | 33 | 148 |
| SD76463-16 | 5 | 725 | 75.9 | 41 | 146 |
| PI476975 | 3 | 723 | 74.6 | 39 | 145 |
| ID0180 | 24 | 711 | 74.4 | 34 | 152 |
| ND8286 | 11 | 706 | 72.8 | 38 | 150 |
| SD82144 | 4 | 704 | 75.2 | 40 | 146 |
| XNH1354 | 20 | 704 | 77 | 36 | 148 |
| CI17439 | 2 | 681 | 71.8 | 39 | 150 |
| ND8215 | 10 | 681 | 68.4 | 40 | 151 |
| ND8460 | 13 | 679 | 74.7 | 42 | 149 |
| NE83432 | 16 | 673 | 76.8 | 35 | 147 |
| ND8407 | 12 | 671 | 71.2 | 39 | 149 |
| NE84581 | 17 | 671 | 75.9 | 29 | 147 |
| WT177 | 22 | 666 | 71.5 | 39 | 152 |
| WT179 | 23 | 666 | 71.5 | 37 | 152 |
| CI1442 | 1 | 662 | 74.4 | 38 | 150 |
| MT8039 | 26 | 627 | 73.6 | 37 | 148 |
| ND8212 | 9 | 622 | 69 | 37 | 150 |
| SD78207-4 | 7 | 607 | 75 | 34 | 148 |
| WT176 | 21 | 583 | 67.1 | 40 | 153 |
| SD82114 | 6 | 577 | 74.3 | 36 | 146 |
| SD791231 | 8 | 575 | 76.1 | 36 | 147 |
| XH947 | 19 | 562 | 73.9 | 33 | 147 |
| <hr/> | | | | | |
| MEAN | | 673 | | | |
| LSD(.05) | | N.S. | | | |
| C.V. | | 16.5 | | | |

BOZEMAN, MONTANA - FOUR REPLICATIONS

| C.I. OR SEL. NO. | : :ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1 : | : LODGING : : % : | : STEM RUST: : SEV.:RESP: : : 0-5 : | : SEEDLING : : COLOR* : : 1-5 : | : SEEDLING : : HABIT** : : 1-5 : | : SEEDLING : : WIDTH*** : : 1-5 : |
|---------------------|-------------------------|------------------------|---------------------------------------|-----------------------------------|--|----------------------|---|---------------------------------------|--|---|
| NE83432 | 16 | 4408 | 72.8 | 95 | 164 | 1 | 60 | 5 | 3 | 3 |
| PI476975 | 3 | 4170 | 76.8 | 91 | 159 | 0 | 1 | 1 | 2.5 | 3 |
| NE82438 | 15 | 4049 | 77 | 92 | 166 | 0 | 5 | 1 | 3.5 | 3.5 |
| ID0180 | 24 | 3866 | 78.6 | 105 | 169 | 0 | 90 | 8 | 3 | 3 |
| XNH1354 | 20 | 3778 | 74.6 | 96 | 166 | 0 | 90 | 8 | 3 | 3 |
| NA-81-362-5 | 18 | 3743 | 77.7 | 94 | 162 | 0 | 50 | 5 | 3.5 | 3 |
| ID0301 | 25 | 3669 | 72.2 | 91 | 167 | 1 | 90 | 8 | 2.5 | 3 |
| ND8286 | 11 | 3648 | 80.1 | 112 | 166 | 0 | 10 | 3 | 3.5 | 3.5 |
| SD76463-16 | 5 | 3614 | 76.9 | 103 | 166 | 1 | 50 | 8 | 3.5 | 3 |
| MT8039 | 26 | 3447 | 72 | 104 | 162 | 0 | 10 | 2 | 3 | 3 |
| SD82114 | 6 | 3426 | 79.9 | 98 | 161 | 0 | 10 | 3 | 2.7 | 3 |
| ND8407 | 12 | 3393 | 79.5 | 110 | 164 | 1 | 5 | 1 | 3 | 3 |
| NE84581 | 17 | 3380 | 80.2 | 98 | 161 | 1 | 5 | 1 | 3 | 3.5 |
| ND8460 | 13 | 3337 | 80.4 | 109 | 165 | 0 | 10 | 2 | 3 | 3 |
| NE82656 | 14 | 3321 | 74 | 100 | 165 | 0 | 5 | 2 | 2.5 | 3 |
| WT179 | 23 | 3288 | 78.7 | 102 | 168 | 1 | 10 | 3 | 4 | 4 |
| ND8215 | 10 | 3183 | 79.3 | 114 | 165 | 0 | 5 | 1 | 3 | 3.5 |
| WT176 | 21 | 3151 | 76 | 101 | 169 | 0 | 90 | 8 | 3 | 3 |
| ND8212 | 9 | 3135 | 79.3 | 101 | 166 | 0 | 1 | 1 | 3.5 | 3 |
| SD82144 | 4 | 3131 | 75.9 | 98 | 160 | 0 | 1 | 1 | 3 | 3 |
| SD78207-4 | 7 | 2864 | 78.4 | 108 | 164 | 0 | 20 | 3 | 3.5 | 3 |
| SD791231 | 8 | 2863 | 78.9 | 103 | 164 | 0 | 10 | 3 | 3 | 3.5 |
| WT177 | 22 | 2774 | 78.4 | 107 | 165 | 3 | 10 | 3 | 3.5 | 3 |
| XH947 | 19 | 2685 | 71 | 95 | 160 | 1 | 50 | 5 | 3 | 3.5 |
| CI17439 | 2 | 2238 | 80 | 99 | 167 | 1 | 10 | 2 | 4 | 4 |
| CI1442 | 1 | 1750 | 77.4 | 94 | 164 | 4 | 30 | 8 | 3 | 3 |

MEAN 3320
LSD(.05) 625
C.V. 13.4

* 1=yellow, 5=blue; ** 1=erect, 5=prostrate; *** 1=wide, 5=narrow.

ABERDEEN

IDAHO

TWO REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: NO. | : YIELD KG/HA | : PLANT HEIGHT CM | : DAYS TO HEADING FROM 1/1: | : DAYS TO RIPENING: FROM 1/1: | : LODGING 0-9 | : STRAW STRENGTH 0-5 | : FROST DAMAGE 0-5 |
|---------------------|--------------------|---------------------|----------------------------|--------------------------------------|--|---------------------|-------------------------------|-----------------------------|
| BLIZZARD | 29 | 5546 | 96 | 160 | 191 | 1 | 3 | 3 |
| NE82438 | 15 | 5536 | 84 | 156 | 191 | 1 | 2 | 2 |
| XNH1354 | 20 | 5050 | 83 | 157 | 189 | 0 | 2 | 3 |
| NE83432 | 16 | 4142 | 76 | 156 | 188 | 0 | 3 | 3 |
| ND8286 | 11 | 4128 | 96 | 161 | 187 | 1 | 3 | 2 |
| WT176 | 21 | 4073 | 92 | 161 | 189 | 0 | 4 | 3 |
| SD78207-4 | 7 | 3955 | 96 | 159 | 191 | 1 | 3 | 3 |
| PI476975 | 3 | 3914 | 71 | 154 | 184 | 0 | 2 | 2 |
| ND8215 | 10 | 3875 | 93 | 157 | 187 | 0 | 2 | 3 |
| NEELEY | 27 | 3864 | 82 | 163 | 189 | 0 | 3 | 3 |
| WESTON | 28 | 3849 | 96 | 155 | 190 | 1 | 3 | 4 |
| NE84581 | 17 | 3837 | 72 | 153 | 184 | 0 | 2 | 3 |
| ID0301 | 25 | 3775 | 74 | 158 | 188 | 0 | 3 | 3 |
| SURVIVOR | 30 | 3745 | 87 | 159 | 188 | 0 | 3 | 3 |
| NE82656 | 14 | 3724 | 84 | 155 | 185 | 0 | 3 | 3 |
| MT8039 | 26 | 3680 | 93 | 156 | 186 | 0 | 3 | 3 |
| XH947 | 19 | 3650 | 74 | 152 | 185 | 0 | 2 | 3 |
| ND8407 | 12 | 3614 | 110 | 159 | 188 | 1 | 3 | 3 |
| SD82144 | 4 | 3558 | 96 | 154 | 182 | 1 | 3 | 3 |
| SD791231 | 8 | 3557 | 89 | 158 | 187 | 1 | 3 | 3 |
| SD82114 | 6 | 3541 | 82 | 156 | 185 | 0 | 3 | 3 |
| ID0180 | 24 | 3507 | 73 | 162 | 188 | 0 | 3 | 3 |
| NA-81-362-5 | 18 | 3437 | 64 | 152 | 183 | 0 | 1 | 3 |
| ND8212 | 9 | 3325 | 87 | 159 | 186 | 0 | 2 | 2 |
| SD76463-16 | 5 | 3286 | 86 | 155 | 185 | 0 | 3 | 3 |
| ND8460 | 13 | 3208 | 105 | 158 | 188 | 1 | 3 | 3 |
| WT177 | 22 | 2982 | 93 | 162 | 190 | 0 | 4 | 2 |
| WT179 | 23 | 2758 | 81 | 163 | 189 | 0 | 3 | 3 |
| CI1442 | 1 | 2743 | 98 | 161 | 187 | 1 | 4 | 3 |
| CI17439 | 2 | 2701 | 87 | 161 | 185 | 0 | 3 | 3 |

MEAN 3752
LSD(.05) 1302
C.V. 17.0

LIND
WASHINGTON
THREE REPLICATIONS

| C.I. OR SEL. NO. | : ENTRY: : NO. : | : YIELD : : KG/HA : | : VOLUME : : WEIGHT : : KG/HL : | : PLANT : : HEIGHT : : CM : | : DAYS TO : : HEADING : : FROM 1/1: |
|---------------------|------------------------|------------------------|---------------------------------------|-----------------------------------|---|
| NE84581 | 17 | 2165 | 79.7 | 61 | 143 |
| ND8215 | 10 | 2056 | 77.3 | 66 | 145 |
| ND8286 | 11 | 2040 | 77.4 | 66 | 145 |
| ID0301 | 25 | 1928 | 78.8 | 58 | 146 |
| XNH1354 | 20 | 1910 | 78.7 | 63 | 145 |
| WT176 | 21 | 1870 | 76 | 73 | 146 |
| MT8039 | 26 | 1834 | 75.9 | 62 | 142 |
| XH947 | 19 | 1831 | 76.6 | 58 | 142 |
| ND8407 | 12 | 1796 | 78.6 | 68 | 143 |
| PI476975 | 3 | 1789 | 77.9 | 52 | 142 |
| ND8212 | 9 | 1784 | 76.8 | 64 | 145 |
| NE82438 | 15 | 1731 | 77.1 | 59 | 144 |
| CI17439 | 2 | 1726 | 78.3 | 65 | 145 |
| NE82656 | 14 | 1722 | 76.9 | 60 | 143 |
| ID0180 | 24 | 1706 | 78.6 | 64 | 146 |
| SD76463-16 | 5 | 1679 | 79.5 | 64 | 142 |
| SD82144 | 4 | 1654 | 77.5 | 60 | 142 |
| CI1442 | 1 | 1650 | 78.8 | 69 | 146 |
| SD82114 | 6 | 1598 | 79.9 | 59 | 142 |
| WT179 | 23 | 1594 | 77.4 | 69 | 149 |
| NA-81-362-5 | 18 | 1536 | 79.6 | 53 | 143 |
| WT177 | 22 | 1533 | 78 | 66 | 146 |
| SD791231 | 8 | 1515 | 77.8 | 65 | 143 |
| ND8460 | 13 | 1329 | 77.7 | 66 | 144 |
| NE83432 | 16 | 1301 | 79.1 | 61 | 144 |
| SD78207-4 | 7 | 800 | 79.3 | 58 | 144 |
| MEAN | | 1695 | | | |
| LSD(.05) | | 289 | | | |
| C.V. | | 10.4 | | | |

Table 14. Summary of mean yields (kg/ha) of 26 wheats grown in the 1988 Northern Regional Performance Nursery at 20 locations with state means and ranks.

| VARIETY OR PEDIGREE | C.I. OR SEL. NO. | ENTRY: NO. | LINCOLN NEBRASKA | NORTH PLATTE NEBRASKA | ALLIANCE NEBRASKA | NEBRASKA STATE MEAN |
|--|---------------------|---------------|---------------------|-----------------------------|----------------------|------------------------|
| HiPlains/Wings/3/Pkr*4/Agnt//Bel.198/Lcr | NE82438 | 15 | 3241 11 | 2255 10 | 4002 4 | 3166 6 |
| Complex Pedigree | NE83432 | 16 | 3728 3 | 2085 17 | 4163 2 | 3325 4 |
| OK11252A/W76-1226 (Abilene) | NA-81-362-5 | 18 | 4282 1 | 2486 5 | 4364 1 | 3711 1 |
| Winter Wheat Hybrid | XNH1354 | 20 | 3232 12 | 2095 16 | 4031 3 | 3120 8 |
| Bez 1/Ctk78//Arthur/Ctk78/3/Bennett | NE84581 | 17 | 3596 4 | 2873 1 | 3773 9 | 3414 3 |
| Brule/3/Parker*4/Agent//Belot.198/Lcr | NE82656 | 14 | 3374 5 | 2798 2 | 3682 11 | 3285 5 |
| Colt | PI476975 | 3 | 3356 6 | 1973 20 | 3335 19 | 2888 14 |
| Lancota/Froid//NE69559/Wnk | MT8039 | 26 | 3141 13 | 2369 8 | 3977 6 | 3162 7 |
| CI15322//3*(Agent/4*Scout66) | SD76463-16 | 5 | 3297 9 | 2496 4 | 3057 21 | 2950 11 |
| SD74221*2/Lathrop | SD82114 | 6 | 3347 7 | 2428 7 | 3082 20 | 2952 10 |
| Winter Wheat Hybrid | XH947 | 19 | 3867 2 | 2675 3 | 3982 5 | 3508 2 |
| Rrr*2/1809 | ND8286 | 11 | 2867 18 | 2184 13 | 3353 16 | 2801 18 |
| Ctk/3/Froid*2//ND363/ND269 | ND8407 | 12 | 3089 14 | 2118 15 | 3341 17 | 2849 15 |
| Rrr/3/Froid//Winoka/WW8 | ND8215 | 10 | 3266 10 | 1827 22 | 3588 13 | 2894 13 |
| CI15322//Aga/4*Sut 66/3/Ctk 78/4/SD74221 | SD82144 | 4 | 3302 8 | 2158 14 | 3339 18 | 2933 12 |
| Rrr//Yogo/Trapper | ND8212 | 9 | 2235 25 | 2059 19 | 3600 12 | 2631 21 |
| Complex Pedigree | ID0301 | 25 | 2262 24 | 1705 25 | 3948 7 | 2638 20 |
| Turkey/Burt//Bezostaya 1 | ID0180 | 24 | 2345 22 | 1671 26 | 3412 15 | 2476 24 |
| SD76669*2/KS71591 | SD791231 | 8 | 2955 15 | 2232 11 | 3707 10 | 2965 9 |
| SD76109/Rose | SD78207-4 | 7 | 2930 16 | 2443 6 | 3055 22 | 2809 17 |
| Kharkov 22 MC/Bezostaya 1 | WT176 | 21 | 2291 23 | 1788 23 | 3472 14 | 2517 23 |
| Roughrider | CI17439 | 2 | 2486 20 | 2208 12 | 3827 8 | 2840 16 |
| Rrr/F0.1527 | ND8460 | 13 | 2878 17 | 2307 9 | 2999 24 | 2728 19 |
| Norstar/Rrr | WT179 | 23 | 2441 21 | 1723 24 | 2863 26 | 2342 26 |
| Kharkof | CI1442 | 1 | 2573 19 | 2066 18 | 2961 25 | 2533 22 |
| Norstar/Rrr | WT177 | 22 | 2215 26 | 1961 21 | 3026 23 | 2400 25 |
| MEAN | | | 3023 | 2192 | 3536 | 2917 |
| LSD(.05) | | | 489 | 403 | 650 | 545 |
| C.V. | | | 9.9 | 11.2 | 11.2 | 10.9 |

Table 14. Continued.

| C.I. OR SEL. NO. | ENTRY : NO. | BROOKINGS : S. DAKOTA | HIGHMORE : S. DAKOTA | PRESHO : S. DAKOTA | SOUTH : DAKOTA | ARCHER : WYOMING | SHERIDAN : WYOMING | WYOMING : STATE MEAN |
|---------------------|----------------|--------------------------|-------------------------|-----------------------|-------------------|---------------------|-----------------------|-------------------------|
| NE82438 | 15 | 2526 2 | 2189 6 | 1539 8 | 2085 5 | 1578 12 | 1549 14 | 1564 14 |
| NE83432 | 16 | 2307 3 | 2354 3 | 1920 2 | 2194 3 | 1565 14 | 1988 2 | 1777 4 |
| NA-81-362-5 | 18 | 2836 1 | 2623 1 | 1730 5 | 2396 1 | 1527 15 | 2009 1 | 1768 5 |
| XNH1354 | 20 | 1853 16 | 1665 14 | 1755 4 | 1758 10 | 1950 1 | 1757 6 | 1854 2 |
| NE84581 | 17 | 2275 6 | 2296 4 | 1786 3 | 2119 4 | 1809 4 | 1598 13 | 1704 8 |
| NE82656 | 14 | 2180 7 | 2588 2 | 1996 1 | 2255 2 | 1596 11 | 1849 4 | 1723 7 |
| PI476975 | 3 | 2106 10 | 1752 11 | 1450 12 | 1769 9 | 1861 3 | 1818 5 | 1839 3 |
| MT8039 | 26 | 1617 23 | 1806 9 | 1563 6 | 1662 12 | 1771 6 | 1701 10 | 1736 6 |
| SD76463-16 | 5 | 2282 5 | 2190 5 | 1539 8 | 2004 6 | 1766 7 | 1641 12 | 1704 8 |
| SD82114 | 6 | 2042 12 | 1959 8 | 1239 17 | 1747 11 | 1605 10 | 1251 21 | 1428 20 |
| XH947 | 19 | 2044 11 | 2004 7 | 1537 10 | 1862 7 | 1930 2 | 1045 25 | 1487 17 |
| ND8286 | 11 | 1925 14 | 1669 13 | 1006 21 | 1534 16 | 1681 9 | 1336 19 | 1509 16 |
| ND8407 | 12 | 2293 4 | 1759 10 | 1424 13 | 1825 8 | 1511 17 | 1648 11 | 1579 11 |
| ND8215 | 10 | 2119 9 | 1522 17 | 1115 19 | 1585 14 | 1098 26 | 1302 20 | 1200 24 |
| SD82144 | 4 | 1951 13 | 1728 12 | 1253 16 | 1644 13 | 1775 5 | 1932 3 | 1854 1 |
| ND8212 | 9 | 1657 22 | 1396 19 | 1168 18 | 1407 18 | 1441 19 | 1448 17 | 1445 19 |
| ID0301 | 25 | 864 26 | 1210 21 | 1558 7 | 1210 25 | 1428 20 | 1706 9 | 1567 12 |
| ID0180 | 24 | 1244 25 | 1090 24 | 911 23 | 1082 26 | 1491 18 | 1751 7 | 1621 10 |
| SD791231 | 8 | 1662 21 | 1657 15 | 1332 14 | 1551 15 | 1527 15 | 1036 26 | 1281 22 |
| SD78207-4 | 7 | 1678 20 | 1351 20 | 1037 20 | 1355 21 | 1199 22 | 1719 8 | 1459 18 |
| WT176 | 21 | 1558 24 | 1074 25 | 1532 11 | 1388 19 | 1128 25 | 1473 15 | 1300 21 |
| CI17439 | 2 | 1865 15 | 1121 22 | 661 26 | 1216 24 | 1574 13 | 1464 16 | 1519 15 |
| ND8460 | 13 | 1679 19 | 1533 16 | 878 24 | 1363 20 | 1296 21 | 1219 22 | 1258 23 |
| WT179 | 23 | 1750 17 | 1105 23 | 976 22 | 1277 22 | 1199 22 | 1186 23 | 1193 25 |
| CI1442 | 1 | 1717 18 | 1465 18 | 1316 15 | 1499 17 | 1704 8 | 1426 18 | 1565 13 |
| WT177 | 22 | 2137 8 | 855 26 | 835 25 | 1275 23 | 1175 24 | 1103 24 | 1139 26 |
| MEAN | | 1930 | 1691 | 1348 | 1656 | 1546 | 1537 | 1541 |
| LSD(.05) | | 651 | 428 | 479 | 430 | 422 | 566 | N.S. |
| C.V. | | 20.6 | 15.4 | 21.7 | 19.4 | 16.6 | 22.5 | 19.7 |

Table 14. Continued.

| C.I. OR SEL. NO. | : :ENTRY: : NO. : | : : WILLISTON : : N. DAKOTA : | : : CASSELTON : : N. DAKOTA : | : : CARRINGTON : : N. DAKOTA : | : : NORTH : : DAKOTA : : STATE MEAN : | : : ROSEMOUNT* : : MINNESOTA : | : : WASECA : : MINNESOTA : | : : LIND : : WASHINGTON : |
|---------------------|-------------------------|-------------------------------------|-------------------------------------|--------------------------------------|--|--------------------------------------|----------------------------------|---------------------------------|
| NE82438 | 15 | 619 10 | 1806 1 | 884 1 | 1103 1 | 1948 9 | 2231 11 | 1731 12 |
| NE83432 | 16 | 678 4 | 1409 12 | 728 6 | 938 4 | 1977 7 | 2846 1 | 1301 25 |
| NA-81-362-5 | 18 | 778 1 | 1025 21 | 467 18 | 757 18 | 1995 6 | 2581 5 | 1536 21 |
| XNH1354 | 20 | 629 7 | 1675 5 | 390 22 | 898 8 | 1825 13 | 1769 19 | 1910 5 |
| NE84581 | 17 | 730 2 | 1212 16 | 583 14 | 842 11 | 2116 3 | 2435 7 | 2165 1 |
| NE82656 | 14 | 620 8 | 1388 13 | 699 8 | 902 7 | 1737 16 | 1712 21 | 1722 14 |
| PI476975 | 3 | 666 5 | 1507 8 | 340 23 | 838 12 | 2087 4 | 1328 25 | 1789 10 |
| MT8039 | 26 | 483 23 | 400 25 | 632 11 | 505 25 | 2661 1 | 1939 16 | 1834 7 |
| SD76463-16 | 5 | 718 3 | 1122 17 | 621 12 | 820 13 | 1948 10 | 2258 9 | 1679 16 |
| SD82114 | 6 | 620 9 | 1300 14 | 393 21 | 771 16 | 2130 2 | 2718 3 | 1598 19 |
| XH947 | 19 | 543 15 | 381 26 | 444 19 | 456 26 | 1365 23 | 1692 24 | 1831 8 |
| ND8286 | 11 | 602 11 | 1689 4 | 823 3 | 1038 2 | 1964 8 | 1974 15 | 2040 3 |
| ND8407 | 12 | 530 19 | 1563 7 | 569 16 | 887 9 | 1417 22 | 2740 2 | 1796 9 |
| ND8215 | 10 | 536 16 | 1497 10 | 719 7 | 918 6 | 1784 15 | 2568 6 | 2056 2 |
| SD82144 | 4 | 518 21 | 1502 9 | 240 25 | 753 19 | 1616 18 | 1695 23 | 1654 17 |
| ND8212 | 9 | 535 18 | 1740 2 | 598 13 | 958 3 | 1890 12 | 2604 4 | 1784 11 |
| ID0301 | 25 | 636 6 | 554 24 | 569 15 | 586 24 | 1556 19 | 1275 26 | 1928 4 |
| ID0180 | 24 | 555 14 | 645 23 | 836 2 | 679 21 | 1509 21 | 2101 13 | 1706 15 |
| SD791231 | 8 | 602 11 | 1107 18 | 211 26 | 640 23 | 1787 14 | 1751 20 | 1515 23 |
| SD78207-4 | 7 | 536 17 | 1295 15 | 422 20 | 751 20 | 1946 11 | 2179 12 | 800 26 |
| WT176 | 21 | 410 25 | 921 22 | 674 9 | 668 22 | 1197 26 | 1842 17 | 1870 6 |
| C117439 | 2 | 523 20 | 1622 6 | 513 17 | 886 10 | 2065 5 | 2060 14 | 1726 13 |
| ND8460 | 13 | 558 13 | 1486 11 | 309 24 | 784 14 | 1302 25 | 1704 22 | 1329 24 |
| WT179 | 23 | 440 24 | 1068 19 | 800 4 | 769 17 | 1309 24 | 2344 8 | 1594 20 |
| C11442 | 1 | 484 22 | 1056 20 | 794 5 | 778 15 | 1618 17 | 1822 18 | 1650 18 |
| WT177 | 22 | 409 26 | 1691 3 | 663 10 | 921 5 | 1515 20 | 2252 10 | 1533 22 |
| MEAN | | 575 | 1256 | 574 | 802 | 1779 | 2093 | 1695 |
| LSD(.05) | | 57 | 682 | 297 | N.S. | N.S. | 574 | 289 |
| C.V. | | 7.1 | 33.1 | 31.6 | 31.3 | 30.3 | 16.7 | 10.4 |

* Not included in state or regional means.

Table 14. Concluded.

| C.I. OR SEL. NO. | : :ENTRY: : NO. : | : : SIDNEY* : MONTANA : | : : MOCCASIN : MONTANA : | : : BOZEMAN : MONTANA : | : : MONTANA : STATE MEAN : | : : CLOVIS : (IRR.) : : NEW MEXICO : | : : CLOVIS : (DRYL.)* : NEW MEXICO : | : : ABERDEEN : IDAHO : | : : REGIONAL : AVERAGE : |
|---------------------|-------------------------|-------------------------------|--------------------------------|-------------------------------|----------------------------------|---|---|------------------------------|--------------------------------|
| NE82438 | 15 | 736 4 | 2549 7 | 4049 3 | 3299 3 | 3784 10 | 1300 23 | 5536 1 | 2475 1 |
| NE83432 | 16 | 673 14 | 2271 15 | 4408 1 | 3340 1 | 4125 6 | 1621 15 | 4142 3 | 2472 2 |
| NA-81-362-5 | 18 | 767 1 | 2396 8 | 3743 6 | 3070 8 | 4114 7 | 1735 11 | 3437 19 | 2467 3 |
| XNH1354 | 20 | 704 9 | 2831 1 | 3778 5 | 3304 2 | 4641 2 | 2088 4 | 5050 2 | 2412 4 |
| NE84581 | 17 | 671 15 | 2726 4 | 3380 13 | 3053 10 | 3393 14 | 2276 1 | 3837 9 | 2380 5 |
| NE82656 | 14 | 763 2 | 2809 2 | 3321 15 | 3065 9 | 3990 8 | 1874 8 | 3724 11 | 2356 6 |
| PI476975 | 3 | 723 6 | 2336 10 | 4170 2 | 3253 5 | 4439 5 | 1745 10 | 3914 7 | 2243 7 |
| MT8039 | 26 | 627 20 | 2791 3 | 3447 10 | 3119 7 | 4643 1 | 1446 19 | 3680 12 | 2223 8 |
| SD76463-16 | 5 | 725 5 | 2392 9 | 3614 9 | 3003 11 | 3480 12 | 1893 7 | 3286 21 | 2202 9 |
| SD82114 | 6 | 577 24 | 2311 11 | 3426 11 | 2869 13 | 4510 4 | 2121 3 | 3541 17 | 2198 10 |
| XH947 | 19 | 562 26 | 2271 14 | 2685 24 | 2478 20 | 4528 3 | 2060 5 | 3650 13 | 2183 11 |
| ND8286 | 11 | 706 8 | 2291 13 | 3648 8 | 2970 12 | 3447 13 | 1709 12 | 4128 4 | 2157 12 |
| ND8407 | 12 | 671 15 | 2047 21 | 3393 12 | 2720 14 | 3207 16 | 1465 18 | 3614 14 | 2155 13 |
| ND8215 | 10 | 681 11 | 2067 20 | 3183 17 | 2625 18 | 3363 15 | 2023 6 | 3875 8 | 2100 14 |
| SD82144 | 4 | 704 9 | 2174 16 | 3131 20 | 2653 17 | 3761 11 | 1548 17 | 3558 15 | 2098 15 |
| ND8212 | 9 | 622 21 | 2293 12 | 3135 19 | 2714 15 | 3127 17 | 1688 13 | 3325 20 | 2009 16 |
| ID0301 | 25 | 748 3 | 2690 6 | 3669 7 | 3180 6 | 3927 9 | 2216 2 | 3775 10 | 1982 17 |
| ID0180 | 24 | 711 7 | 2712 5 | 3866 4 | 3289 4 | 2653 20 | 1419 21 | 3507 18 | 1912 18 |
| SD791231 | 8 | 575 25 | 1903 24 | 2863 22 | 2383 24 | 2685 19 | 1376 22 | 3557 16 | 1900 19 |
| SD78207-4 | 7 | 607 22 | 2047 21 | 2864 21 | 2455 21 | 2488 21 | 1635 14 | 3955 6 | 1882 20 |
| WT176 | 21 | 583 23 | 1849 25 | 3151 18 | 2500 19 | 2449 22 | 1426 20 | 4073 5 | 1856 21 |
| C117439 | 2 | 681 11 | 2085 17 | 2238 25 | 2161 25 | 2800 18 | 1554 16 | 2701 26 | 1851 22 |
| ND8460 | 13 | 679 13 | 1562 26 | 3337 14 | 2450 22 | 1845 26 | 1298 24 | 3208 22 | 1772 23 |
| WT179 | 23 | 666 17 | 2078 18 | 3288 16 | 2683 16 | 2386 23 | 1237 25 | 2758 24 | 1765 24 |
| C11442 | 1 | 662 19 | 1991 23 | 1750 26 | 1870 26 | 2317 24 | 1850 9 | 2743 25 | 1755 25 |
| WT177 | 22 | 666 18 | 2069 19 | 2774 23 | 2422 23 | 2110 25 | 963 26 | 2982 23 | 1752 26 |
| MEAN | | 673 | 2290 | 3320 | 2805 | 3393 | 1676 | 3675 | 2098 |
| LSD(.05) | | N.S. | 427 | 625 | 743 | 930 | N.S. | 1296 | 254 |
| C.V. | | 16.5 | 11.4 | 13.4 | 13.2 | 16.7 | 27.5 | 17.1 | 16.6 |

* Not included in state or regional averages.

Table 15. Summary of mean yields (kg/ha) and ranks of 26 wheats grown in the 1988 Northern Regional Performance Nursery at 11 central and northern locations from which a CV of less than 17.5 and a significant F test for entries were obtained.

| C.I. OR SEL. NO. | : | ENTRY: | : | LINCOLN | : | NORTH | : | PLATTE | : | ALLIANCE | : | ARCHER | : | WASECA | : | HIGHMORE |
|---------------------|----|--------|---|----------|----|----------|----|----------|----|----------|----|---------|----|-----------|----|-----------|
| | | | | | | | | | | | | | | | | |
| | | NO. | : | NEBRASKA | : | NEBRASKA | : | NEBRASKA | : | NEBRASKA | : | WYOMING | : | MINNESOTA | : | S. DAKOTA |
| NE82438 | 15 | | | 3241 | 11 | 2255 | 10 | 4002 | 4 | 1578 | 12 | 2231 | 11 | 2189 | 6 | |
| NA-81-362-5 | 18 | | | 4282 | 1 | 2486 | 5 | 4364 | 1 | 1527 | 15 | 2581 | 5 | 2623 | 1 | |
| NE84581 | 17 | | | 3596 | 4 | 2873 | 1 | 3773 | 9 | 1809 | 4 | 2435 | 7 | 2296 | 4 | |
| NE83432 | 16 | | | 3728 | 3 | 2085 | 17 | 4163 | 2 | 1565 | 14 | 2846 | 1 | 2354 | 3 | |
| XNH1354 | 20 | | | 3232 | 12 | 2095 | 16 | 4031 | 3 | 1950 | 1 | 1769 | 19 | 1665 | 14 | |
| NE82656 | 14 | | | 3374 | 5 | 2798 | 2 | 3682 | 11 | 1596 | 11 | 1712 | 21 | 2588 | 2 | |
| MT8039 | 26 | | | 3141 | 13 | 2369 | 8 | 3977 | 6 | 1771 | 6 | 1939 | 16 | 1806 | 9 | |
| XH947 | 19 | | | 3867 | 2 | 2675 | 3 | 3982 | 5 | 1930 | 2 | 1692 | 24 | 2004 | 7 | |
| SD76463-16 | 5 | | | 3297 | 9 | 2496 | 4 | 3057 | 21 | 1766 | 7 | 2258 | 9 | 2190 | 5 | |
| SD82114 | 6 | | | 3347 | 7 | 2428 | 7 | 3082 | 20 | 1605 | 10 | 2718 | 3 | 1959 | 8 | |
| PI476975 | 3 | | | 3356 | 6 | 1973 | 20 | 3335 | 19 | 1861 | 3 | 1328 | 25 | 1752 | 11 | |
| ND8286 | 11 | | | 2867 | 18 | 2184 | 13 | 3353 | 16 | 1681 | 9 | 1974 | 15 | 1669 | 13 | |
| ND8407 | 12 | | | 3089 | 14 | 2118 | 15 | 3341 | 17 | 1511 | 17 | 2740 | 2 | 1759 | 10 | |
| ND8215 | 10 | | | 3266 | 10 | 1827 | 22 | 3588 | 13 | 1098 | 26 | 2568 | 6 | 1522 | 17 | |
| SD82144 | 4 | | | 3302 | 8 | 2158 | 14 | 3339 | 18 | 1775 | 5 | 1695 | 23 | 1728 | 12 | |
| ID0301 | 25 | | | 2262 | 24 | 1705 | 25 | 3948 | 7 | 1428 | 20 | 1275 | 26 | 1210 | 21 | |
| ID0180 | 24 | | | 2345 | 22 | 1671 | 26 | 3412 | 15 | 1491 | 18 | 2101 | 13 | 1090 | 24 | |
| ND8212 | 9 | | | 2235 | 25 | 2059 | 19 | 3600 | 12 | 1441 | 19 | 2604 | 4 | 1396 | 19 | |
| SD791231 | 8 | | | 2955 | 15 | 2232 | 11 | 3707 | 10 | 1527 | 15 | 1751 | 20 | 1657 | 15 | |
| SD78207-4 | 7 | | | 2930 | 16 | 2443 | 6 | 3055 | 22 | 1199 | 22 | 2179 | 12 | 1351 | 20 | |
| WT176 | 21 | | | 2291 | 23 | 1788 | 23 | 3472 | 14 | 1128 | 25 | 1842 | 17 | 1074 | 25 | |
| ND8460 | 13 | | | 2878 | 17 | 2307 | 9 | 2999 | 24 | 1296 | 21 | 1704 | 22 | 1533 | 16 | |
| C117439 | 2 | | | 2486 | 20 | 2208 | 12 | 3827 | 8 | 1574 | 13 | 2060 | 14 | 1121 | 22 | |
| WT179 | 23 | | | 2441 | 21 | 1723 | 24 | 2863 | 26 | 1199 | 22 | 2344 | 8 | 1105 | 23 | |
| WT177 | 22 | | | 2215 | 26 | 1961 | 21 | 3026 | 23 | 1175 | 24 | 2252 | 10 | 855 | 26 | |
| C11442 | 1 | | | 2573 | 19 | 2066 | 18 | 2961 | 25 | 1704 | 8 | 1822 | 18 | 1465 | 18 | |
| MEAN | | | | 3023 | | 2192 | | 3536 | | 1546 | | 2093 | | 1691 | | |
| LSD(.05) | | | | 489 | | 403 | | 650 | | 422 | | 574 | | 428 | | |
| C.V. | | | | 9.9 | | 11.2 | | 11.2 | | 16.6 | | 16.7 | | 15.4 | | |

Table 15. Concluded.

| C.I. OR SEL. NO. | : :ENTRY: : NO. : | : : MOCCASIN : : MONTANA : | : : BOZEMAN : : MONTANA : | : : ABERDEEN : : IDAHO : | : : LIND : : WASHINGTON : | : : WILLISTON : : N. DAKOTA : | : : REGIONAL : : AVERAGE : | | | | | | |
|---------------------|-------------------------|----------------------------------|---------------------------------|--------------------------------|---------------------------------|-------------------------------------|----------------------------------|------|----|-----|----|------|----|
| NE82438 | 15 | 2549 | 7 | 4049 | 3 | 5536 | 1 | 1731 | 12 | 619 | 10 | 2725 | 1 |
| NA-81-362-5 | 18 | 2396 | 8 | 3743 | 6 | 3437 | 19 | 1536 | 21 | 778 | 1 | 2705 | 2 |
| NE84581 | 17 | 2726 | 4 | 3380 | 13 | 3837 | 9 | 2165 | 1 | 730 | 2 | 2693 | 3 |
| NE83432 | 16 | 2271 | 15 | 4408 | 1 | 4142 | 3 | 1301 | 25 | 678 | 4 | 2685 | 4 |
| XNH1354 | 20 | 2831 | 1 | 3778 | 5 | 5050 | 2 | 1910 | 5 | 629 | 7 | 2631 | 5 |
| NE82656 | 14 | 2809 | 2 | 3321 | 15 | 3724 | 11 | 1722 | 14 | 620 | 8 | 2541 | 6 |
| MT8039 | 26 | 2791 | 3 | 3447 | 10 | 3680 | 12 | 1834 | 7 | 483 | 23 | 2476 | 7 |
| XH947 | 19 | 2271 | 14 | 2685 | 24 | 3650 | 13 | 1831 | 8 | 543 | 15 | 2466 | 8 |
| SD76463-16 | 5 | 2392 | 9 | 3614 | 9 | 3286 | 21 | 1679 | 16 | 718 | 3 | 2432 | 9 |
| SD82114 | 6 | 2311 | 11 | 3426 | 11 | 3541 | 17 | 1598 | 19 | 620 | 9 | 2421 | 10 |
| PI476975 | 3 | 2336 | 10 | 4170 | 2 | 3914 | 7 | 1789 | 10 | 666 | 5 | 2407 | 11 |
| ND8286 | 11 | 2291 | 13 | 3648 | 8 | 4128 | 4 | 2040 | 3 | 602 | 11 | 2403 | 12 |
| ND8407 | 12 | 2047 | 21 | 3393 | 12 | 3614 | 14 | 1796 | 9 | 530 | 19 | 2358 | 13 |
| ND8215 | 10 | 2067 | 20 | 3183 | 17 | 3875 | 8 | 2056 | 2 | 536 | 16 | 2326 | 14 |
| SD82144 | 4 | 2174 | 16 | 3131 | 20 | 3558 | 15 | 1654 | 17 | 518 | 21 | 2276 | 15 |
| ID0301 | 25 | 2690 | 6 | 3669 | 7 | 3775 | 10 | 1928 | 4 | 636 | 6 | 2229 | 16 |
| ID0180 | 24 | 2712 | 5 | 3866 | 4 | 3507 | 18 | 1706 | 15 | 555 | 14 | 2223 | 17 |
| ND8212 | 9 | 2293 | 12 | 3135 | 19 | 3325 | 20 | 1784 | 11 | 535 | 18 | 2219 | 18 |
| SD791231 | 8 | 1903 | 24 | 2863 | 22 | 3557 | 16 | 1515 | 23 | 602 | 11 | 2206 | 19 |
| SD78207-4 | 7 | 2047 | 21 | 2864 | 21 | 3955 | 6 | 800 | 26 | 536 | 17 | 2124 | 20 |
| WT176 | 21 | 1849 | 25 | 3151 | 18 | 4073 | 5 | 1870 | 6 | 410 | 25 | 2086 | 21 |
| ND8460 | 13 | 1562 | 26 | 3337 | 14 | 3208 | 22 | 1329 | 24 | 558 | 13 | 2065 | 22 |
| CI17439 | 2 | 2085 | 17 | 2238 | 25 | 2701 | 26 | 1726 | 13 | 523 | 20 | 2050 | 23 |
| WT179 | 23 | 2078 | 18 | 3288 | 16 | 2758 | 24 | 1594 | 20 | 440 | 24 | 1985 | 24 |
| WT177 | 22 | 2069 | 19 | 2774 | 23 | 2982 | 23 | 1533 | 22 | 409 | 26 | 1932 | 25 |
| CI1442 | 1 | 1991 | 23 | 1750 | 26 | 2743 | 25 | 1650 | 18 | 484 | 22 | 1928 | 26 |
| MEAN | | 2290 | | 3320 | | 3675 | | 1695 | | 575 | | 2330 | |
| LSD(.05) | | 427 | | 625 | | 1296 | | 289 | | 57 | | 299 | |
| C.V. | | 11.4 | | 13.4 | | 17.1 | | 10.4 | | 7.1 | | 14.0 | |

Table 16. Summary of mean yields (kg/ha) and ranks for 20 wheats grown in the Northern Regional Performance Nursery at 19 locations in 1987 and 1988 with state means and ranks.

| VARIETY OR PEDIGREE | C.I. OR SEL. NO. | : ENTRY: NO.: | LINCOLN NEBRASKA | NORTH PLATTE NEBRASKA | ALLIANCE NEBRASKA | NEBRASKA : STATE MEAN : |
|--|---------------------|---------------------|---------------------|-----------------------------|----------------------|----------------------------|
| OK11252A/W76-1226 (Abilene) | NA-81-362-5 | 18 | 3704 1 | 2944 5 | 4789 1 | 3812 1 |
| Brule/3/Parker*4/Agent//Belot.198/Lcr | NE82656 | 14 | 2549 11 | 3591 1 | 4285 3 | 3475 2 |
| Lancota/Froid//NE69559/Wnk | MT8039 | 26 | 2465 12 | 3054 2 | 4456 2 | 3325 3 |
| HiPlains/Wings/3/Pkr*4/Agnt//Be1.198/Lcr | NE82438 | 15 | 2584 9 | 2997 4 | 4159 4 | 3246 4 |
| Colt | PI476975 | 3 | 2708 6 | 3008 3 | 3931 5 | 3216 5 |
| Rrr*2/1809 | ND8286 | 11 | 2563 10 | 2858 10 | 3855 6 | 3092 7 |
| C115322//3*(Agent/4*Scout66) | SD76463-16 | 5 | 2771 5 | 2904 7 | 3347 15 | 3007 10 |
| C115322//Aga/4*Sut 66/3/Ctk 78/4/SD74221 | SD82144 | 4 | 2689 7 | 2892 8 | 3467 13 | 3016 9 |
| SD74221*2/Lathrop | SD82114 | 6 | 2858 2 | 2937 6 | 3630 10 | 3142 6 |
| Turkey/Burt//Bezostaya 1 | ID0180 | 24 | 1945 20 | 2584 12 | 3822 7 | 2784 14 |
| Rrr/3/Froid//Winoka/WW8 | ND8215 | 10 | 2819 4 | 2264 19 | 3499 11 | 2860 13 |
| Rrr//Yogo/Trapper | ND8212 | 9 | 2279 14 | 2451 16 | 3449 14 | 2726 17 |
| Kharkov 22 MC/Bezostaya 1 | WT176 | 21 | 2161 16 | 2521 13 | 3497 12 | 2727 16 |
| SD76109/Rose | SD78207-4 | 7 | 2461 13 | 2863 9 | 3335 17 | 2886 11 |
| Ctk/3/Froid*2//ND363/ND269 | ND8407 | 12 | 2831 3 | 2455 15 | 3340 16 | 2875 12 |
| SD76669*2/KS71591 | SD791231 | 8 | 2637 8 | 2774 11 | 3754 8 | 3055 8 |
| Roughrider | CI17439 | 2 | 2139 17 | 2509 14 | 3667 9 | 2771 15 |
| Norstar/Rrr | WT179 | 23 | 2019 19 | 2363 18 | 3144 18 | 2509 19 |
| Norstar/Rrr | WT177 | 22 | 2054 18 | 2256 20 | 2847 20 | 2386 20 |
| Kharkof | CI1442 | 1 | 2251 15 | 2376 17 | 2917 19 | 2515 18 |
| MEAN | | | 2524 | 2730 | 3660 | 2971 |
| LSD(.05) | | | 626 | 637 | 793 | 438 |
| C.V. | | | 11.1 | 11.7 | 11.8 | 11.8 |

Table 16. Continued.

| C.I. OR SEL. NO. | ENTRY: NO. | S. DAKOTA | | HIGHMORE | | SOUTH | | WILLISTON | | CASSELTON | | CARRINGTON | | NORTH | |
|---------------------|---------------|-----------|-------------|-------------|------------|---------|----------|-------------|-------------|--------------|---------|------------|--------------|----------|--------------|
| | | : NO. | : S. DAKOTA | : S. DAKOTA | : HIGHMORE | : SOUTH | : DAKOTA | : WILLISTON | : CASSELTON | : CARRINGTON | : NORTH | : DAKOTA | : STATE MEAN | : DAKOTA | : STATE MEAN |
| NA-81-362-5 | 18 | | 2446 | 3 | 3382 | 1 | 2914 | 2 | 1358 | 1 | 3259 | 2 | 1401 | 17 | 2006 |
| NE82656 | 14 | | 2688 | 1 | 3184 | 2 | 2936 | 1 | 1351 | 3 | 2916 | 6 | 1815 | 2 | 2027 |
| MT8039 | 26 | | 2540 | 2 | 2693 | 5 | 2617 | 4 | 1200 | 6 | 2405 | 20 | 1456 | 13 | 1687 |
| NE82438 | 15 | | 2233 | 7 | 2780 | 4 | 2507 | 5 | 1142 | 12 | 3583 | 1 | 1492 | 12 | 2073 |
| P1476975 | 3 | | 2255 | 6 | 2424 | 11 | 2339 | 8 | 1146 | 11 | 2942 | 5 | 1152 | 20 | 1747 |
| ND8286 | 11 | | 2163 | 11 | 2584 | 7 | 2373 | 7 | 1193 | 7 | 3116 | 3 | 1835 | 1 | 2048 |
| SD76463-16 | 5 | | 2349 | 5 | 2928 | 3 | 2639 | 3 | 1352 | 2 | 2698 | 11 | 1541 | 11 | 1864 |
| SD82144 | 4 | | 2127 | 12 | 2480 | 9 | 2303 | 9 | 1140 | 13 | 3021 | 4 | 1401 | 18 | 1854 |
| SD82114 | 6 | | 2191 | 10 | 2666 | 6 | 2428 | 6 | 1231 | 4 | 2640 | 13 | 1439 | 15 | 1770 |
| ID0180 | 24 | | 1918 | 18 | 1995 | 19 | 1956 | 18 | 1151 | 8 | 2639 | 14 | 1659 | 6 | 1816 |
| ND8215 | 10 | | 2070 | 15 | 2434 | 10 | 2252 | 12 | 1147 | 10 | 2901 | 8 | 1774 | 3 | 1940 |
| ND8212 | 9 | | 2216 | 8 | 2364 | 12 | 2290 | 10 | 1111 | 14 | 2902 | 7 | 1766 | 4 | 1926 |
| WT176 | 21 | | 2410 | 4 | 2080 | 17 | 2245 | 13 | 1088 | 17 | 2487 | 19 | 1596 | 8 | 1724 |
| SD78207-4 | 7 | | 2087 | 13 | 2252 | 13 | 2169 | 15 | 1102 | 16 | 2671 | 12 | 1439 | 16 | 1738 |
| ND8407 | 12 | | 2072 | 14 | 2492 | 8 | 2282 | 11 | 1210 | 5 | 2488 | 18 | 1575 | 9 | 1758 |
| SD791231 | 8 | | 2210 | 9 | 2213 | 14 | 2211 | 14 | 1084 | 18 | 2568 | 16 | 1283 | 19 | 1645 |
| CI17439 | 2 | | 1742 | 20 | 2058 | 18 | 1900 | 19 | 1150 | 9 | 2715 | 10 | 1630 | 7 | 1832 |
| WT179 | 23 | | 1947 | 17 | 2087 | 16 | 2017 | 17 | 1059 | 19 | 2604 | 15 | 1545 | 10 | 1736 |
| WT177 | 22 | | 1788 | 19 | 1954 | 20 | 1871 | 20 | 1028 | 20 | 2723 | 9 | 1449 | 14 | 1733 |
| CI1442 | 1 | | 1975 | 16 | 2205 | 15 | 2090 | 16 | 1103 | 15 | 2500 | 17 | 1742 | 5 | 1782 |
| MEAN | | | 2171 | | 2463 | | 2317 | | 1167 | | 2789 | | 1550 | | 1835 |
| LSD(.05) | | | 446 | | 454 | | 520 | | N.S. | | N.S. | | N.S. | | N.S. |
| C.V. | | | 12.2 | | 10.1 | | 11.1 | | 7.2 | | 15.9 | | 27.6 | | 18.9 |

Table 16. Continued.

| C.I. OR SEL. NO. | : :ENTRY: : NO. : | : : ARCHER : WYOMING : | : : SHERIDAN : WYOMING : | : : WYOMING : STATE MEAN : | : : MOCCASIN : MONTANA : | : : SIDNEY* : MONTANA : | : : BOZEMAN : MONTANA : | : : MONTANA : STATE MEAN : | | | | | | | |
|---------------------|-------------------------|------------------------------|--------------------------------|----------------------------------|--------------------------------|-------------------------------|-------------------------------|----------------------------------|----|------|----|------|----|------|----|
| NA-81-362-5 | 18 | 2140 | 4 | 2633 | 2 | 2387 | 2 | 2922 | 15 | 1918 | 3 | 3746 | 13 | 3334 | 12 |
| WE82656 | 14 | 2183 | 1 | 2247 | 10 | 2215 | 8 | 2951 | 14 | 1822 | 12 | 4026 | 7 | 3489 | 11 |
| MT8039 | 26 | 2106 | 6 | 2195 | 12 | 2151 | 9 | 3639 | 2 | 1995 | 2 | 4495 | 2 | 4067 | 2 |
| WE82438 | 15 | 1741 | 18 | 2094 | 13 | 1918 | 15 | 3623 | 3 | 1895 | 4 | 4166 | 5 | 3895 | 3 |
| PI476975 | 3 | 2181 | 2 | 2381 | 7 | 2281 | 4 | 2890 | 16 | 1879 | 6 | 4326 | 3 | 3608 | 7 |
| ND8286 | 11 | 1912 | 14 | 1868 | 17 | 1890 | 16 | 3607 | 4 | 1810 | 13 | 4112 | 6 | 3860 | 4 |
| SD76463-16 | 5 | 2096 | 7 | 2450 | 5 | 2273 | 5 | 3152 | 10 | 1867 | 8 | 4214 | 4 | 3683 | 5 |
| SD82144 | 4 | 2140 | 5 | 2747 | 1 | 2443 | 1 | 3082 | 12 | 1807 | 14 | 3521 | 15 | 3301 | 13 |
| SD82114 | 6 | 1745 | 16 | 1771 | 19 | 1758 | 20 | 2758 | 17 | 1617 | 19 | 3760 | 11 | 3259 | 14 |
| ID0180 | 24 | 2155 | 3 | 2550 | 3 | 2352 | 3 | 4125 | 1 | 1871 | 7 | 4512 | 1 | 4319 | 1 |
| ND8215 | 10 | 1785 | 15 | 2271 | 9 | 2028 | 11 | 3318 | 6 | 1859 | 9 | 3949 | 8 | 3634 | 6 |
| ND8212 | 9 | 1982 | 12 | 2526 | 4 | 2254 | 6 | 3351 | 5 | 1839 | 11 | 3749 | 12 | 3550 | 10 |
| WT176 | 21 | 1623 | 20 | 2380 | 8 | 2002 | 13 | 3269 | 7 | 2021 | 1 | 3851 | 10 | 3560 | 8 |
| SD78207-4 | 7 | 2067 | 8 | 1967 | 16 | 2017 | 12 | 3035 | 13 | 1762 | 15 | 3410 | 16 | 3222 | 15 |
| ND8407 | 12 | 2028 | 9 | 2438 | 6 | 2233 | 7 | 2647 | 19 | 1891 | 5 | 3596 | 14 | 3121 | 18 |
| SD791231 | 8 | 1945 | 13 | 1577 | 20 | 1761 | 19 | 2530 | 20 | 1478 | 20 | 3367 | 17 | 2948 | 19 |
| CI17439 | 2 | 2007 | 11 | 1849 | 18 | 1928 | 14 | 3127 | 11 | 1851 | 10 | 3275 | 18 | 3201 | 16 |
| WT179 | 23 | 1662 | 19 | 2061 | 14 | 1862 | 18 | 3190 | 9 | 1760 | 16 | 3927 | 9 | 3558 | 9 |
| WT177 | 22 | 1742 | 17 | 2032 | 15 | 1887 | 17 | 3215 | 8 | 1664 | 18 | 3145 | 19 | 3180 | 17 |
| CI1442 | 1 | 2016 | 10 | 2214 | 11 | 2115 | 10 | 2706 | 18 | 1698 | 17 | 2523 | 20 | 2614 | 20 |

* Not included in state or regional averages.

Table 16. Concluded.

| C.I. OR SEL. NO. | : ENTRY: : NO. | : CLOVIS : (IRR.) : NEW MEXICO | : CLOVIS : (DRYL.)* : NEW MEXICO | : WASECA : MINNESOTA | : ROSEMOUNT* : MINNESOTA | : ABERDEEN : IDAHO | : LIND* : WASHINGTON | : REGIONAL : AVERAGE |
|---------------------|----------------------|--------------------------------------|--|-------------------------|-----------------------------|-----------------------|-------------------------|-------------------------|
| NA-81-362-5 | 18 | 5195 3 | 3063 3 | 2613 3 | 1991 9 | 5048 8 | 1188 19 | 3172 1 |
| NE82656 | 14 | 5273 2 | 2817 7 | 2077 16 | 2058 5 | 5091 6 | 1326 17 | 3082 2 |
| MT8039 | 26 | 4994 5 | 2832 6 | 2354 11 | 2476 1 | 5670 2 | 1486 11 | 3048 3 |
| NE82438 | 15 | 3613 16 | 2123 19 | 2602 4 | 2081 4 | 6210 1 | 1246 18 | 3001 4 |
| PI476975 | 3 | 4712 6 | 2721 10 | 1988 17 | 2131 2 | 5308 4 | 1372 16 | 2890 5 |
| ND8286 | 11 | 3964 13 | 2511 15 | 2367 10 | 2123 3 | 5120 5 | 1700 4 | 2875 6 |
| SD76463-16 | 5 | 4488 8 | 3135 2 | 2513 7 | 2048 6 | 3949 15 | 1663 5 | 2850 7 |
| SD82144 | 4 | 5135 4 | 2986 5 | 1879 19 | 1854 13 | 4935 11 | 1546 9 | 2844 8 |
| SD82114 | 6 | 5279 1 | 3162 1 | 2515 6 | 2022 7 | 5050 7 | 1379 15 | 2831 9 |
| ID0180 | 24 | 3401 17 | 2630 12 | 2328 12 | 1610 16 | 5383 3 | 1471 12 | 2811 10 |
| ND8215 | 10 | 4559 7 | 3033 4 | 2620 2 | 1937 10 | 4592 12 | 1745 2 | 2800 11 |
| ND8212 | 9 | 4115 11 | 2730 9 | 2727 1 | 1874 11 | 4428 13 | 1575 8 | 2761 12 |
| WT176 | 21 | 4148 10 | 2589 14 | 2228 14 | 1360 20 | 4935 10 | 1763 1 | 2685 13 |
| SD78207-4 | 7 | 3797 14 | 2188 18 | 2215 15 | 1864 12 | 4947 9 | 855 20 | 2643 14 |
| ND8407 | 12 | 4035 12 | 2628 13 | 2589 5 | 1661 15 | 3806 17 | 1652 6 | 2640 15 |
| SD791231 | 8 | 4156 9 | 2476 17 | 1963 18 | 1843 14 | 4248 14 | 1431 13 | 2554 16 |
| CI17439 | 2 | 3750 15 | 2770 8 | 2321 13 | 2021 8 | 3919 16 | 1727 3 | 2524 17 |
| WT179 | 23 | 3344 18 | 2501 16 | 2409 8 | 1402 19 | 3630 19 | 1540 10 | 2466 18 |
| WT177 | 22 | 3028 20 | 2092 20 | 2371 9 | 1545 17 | 3761 18 | 1382 14 | 2359 19 |
| CI1442 | 1 | 3097 19 | 2656 11 | 1828 20 | 1502 18 | 3606 20 | 1580 7 | 2337 20 |
| MEAN | | 4204 | 2682 | 2325 | 1870 | 4682 | 1483 | 2759 |
| LSD(.05) | | 1305 | N.S. | N.S. | 392 | 1889 | 448 | 310 |
| C.V. | | 11.0 | 18.5 | 12.5 | 22.4 | 13.7 | 13.6 | 13.8 |

* Not included in state or regional averages.

Table 17. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 26 entries in the 1988 Northern Regional Performance Nursery grown at 17 locations.

| C.I. OR SEL. NO. | : : ENTRY: : NO. : | : MEAN YIELD : : OVER 17 : : LOCATIONS : : KG/HA : | : : REGRESSION : : COEFFICIENT : : (b) : | : : CORRELATION : : COEFFICIENT : : (r) : | : COEFFICIENT : : OF : : DETERMINATION : : (r^2) : |
|---------------------|--------------------------|---|---|--|---|
| NE82438 | 15 | 2475 | 1.24 | 0.96 | 0.92 |
| NE83432 | 16 | 2472 | 1.20 | 0.96 | 0.93 |
| NA-81-362-5 | 18 | 2467 | 1.16 | 0.94 | 0.88 |
| XNH1354 | 20 | 2412 | 1.29 | 0.96 | 0.93 |
| NE84581 | 17 | 2380 | 1.01 | 0.97 | 0.95 |
| NE82656 | 14 | 2356 | 1.00 | 0.95 | 0.91 |
| PI476975 | 3 | 2243 | 1.15 | 0.95 | 0.90 |
| MT8039 | 26 | 2223 | 1.19 | 0.95 | 0.91 |
| SD76463-16 | 5 | 2202 | 0.92 | 0.97 | 0.94 |
| SD82114 | 6 | 2198 | 1.09 | 0.95 | 0.90 |
| XH947 | 19 | 2183 | 1.18 | 0.92 | 0.85 |
| ND8286 | 11 | 2157 | 1.01 | 0.97 | 0.95 |
| ND8407 | 12 | 2155 | 0.94 | 0.97 | 0.95 |
| ND8215 | 10 | 2100 | 1.03 | 0.97 | 0.94 |
| SD82144 | 4 | 2098 | 1.01 | 0.97 | 0.95 |
| ND8212 | 9 | 2009 | 0.89 | 0.95 | 0.91 |
| ID0301 | 25 | 1982 | 1.12 | 0.91 | 0.84 |
| ID0180 | 24 | 1912 | 0.96 | 0.92 | 0.84 |
| SD791231 | 8 | 1900 | 0.97 | 0.97 | 0.94 |
| SD78207-4 | 7 | 1882 | 0.94 | 0.94 | 0.88 |
| WT176 | 21 | 1856 | 0.94 | 0.94 | 0.88 |
| CI17439 | 2 | 1851 | 0.80 | 0.91 | 0.82 |
| ND8460 | 13 | 1772 | 0.83 | 0.91 | 0.84 |
| WT179 | 23 | 1765 | 0.78 | 0.94 | 0.89 |
| CI1442 | 1 | 1755 | 0.62 | 0.92 | 0.84 |
| WT177 | 22 | 1752 | 0.74 | 0.90 | 0.81 |

Table 18. Mean yield, regression coefficient, correlation coefficient, and coefficient of determination from linear regression analysis of variety mean yield on nursery mean yield for the 20 entries in the 1987 and 1988 Northern Regional Performance Nursery grown at 15 locations.

| C.I. OR SEL. NO. | : ENTRY: NO. : | : MEAN YIELD : OVER 15 : LOCATIONS : KG/HA : | : REGRESSION : COEFFICIENT : (b) : | : CORRELATION : COEFFICIENT : (r) : | : COEFFICIENT : OF : DETERMINATION : (r ²) : |
|---------------------|----------------------|---|---|--|---|
| NA-81-362-5 | 18 | 3172 | 1.12 | 0.94 | 0.88 |
| NE82656 | 14 | 3082 | 1.09 | 0.95 | 0.89 |
| MT8039 | 26 | 3048 | 1.26 | 0.97 | 0.93 |
| NE82438 | 15 | 3001 | 1.06 | 0.91 | 0.83 |
| PI476975 | 3 | 2890 | 1.09 | 0.95 | 0.91 |
| ND8286 | 11 | 2875 | 1.04 | 0.97 | 0.95 |
| SD76463-16 | 5 | 2850 | 0.90 | 0.97 | 0.93 |
| SD82144 | 4 | 2844 | 1.10 | 0.97 | 0.94 |
| SD82114 | 6 | 2831 | 1.07 | 0.95 | 0.91 |
| ID0180 | 24 | 2811 | 1.17 | 0.94 | 0.88 |
| ND8215 | 10 | 2800 | 1.03 | 0.97 | 0.95 |
| ND8212 | 9 | 2761 | 0.95 | 0.97 | 0.94 |
| WT176 | 21 | 2685 | 1.09 | 0.97 | 0.94 |
| SD78207-4 | 7 | 2643 | 0.99 | 0.98 | 0.95 |
| ND8407 | 12 | 2640 | 0.75 | 0.94 | 0.89 |
| SD791231 | 8 | 2554 | 0.95 | 0.97 | 0.93 |
| CI17439 | 2 | 2524 | 0.91 | 0.96 | 0.92 |
| WT179 | 23 | 2466 | 0.89 | 0.96 | 0.92 |
| WT177 | 22 | 2359 | 0.80 | 0.94 | 0.89 |
| CI1442 | 1 | 2337 | 0.71 | 0.95 | 0.90 |

Table 19. Summary of agronomic and yield data for 26 wheats in the 1988 Northern Regional Performance Nursery.

| C.I. OR SEL. NO. | : : NO. | : PLANT : ENTRY: HEIGHT : CM | : LODGING : 0-5 | : STRAW : STRENGTH : 1-5 | : DAYS TO : HEADING : FROM 1/1 | : DAYS TO : RIPENING: SURVIVAL : FROM 1/1 | : WINTER : % | : LEAF RUST: SEVERITY : : % | : STEM RUST: SEVERITY : : % | : BYD : 0-9 | : VOLUME : KG/HL | : YIELD : KG/HA |
|---------------------|------------|------------------------------------|--------------------|-----------------------------|-----------------------------------|--|-----------------|--------------------------------|--------------------------------|----------------|---------------------|--------------------|
| NUMBER OF LOCATIONS | 18 | 2 | 1 | 18 | 1 | 2 | 2 | 1 | 1 | 1 | 19 | 17 |
| NE82438 | 15 | 64 | 0 | 2 | 151 | 191 | 93 | 7 | 5 | 2 | 72.3 | 2475 |
| NE83432 | 16 | 64 | 1 | 3 | 151 | 188 | 87 | 7 | 60 | 4 | 73.7 | 2472 |
| NA-81-362-5 | 18 | 60 | 1 | 1 | 149 | 183 | 63 | 5 | 50 | 2 | 75.4 | 2467 |
| XNH1354 | 20 | 65 | 0 | 2 | 152 | 189 | 80 | 23 | 90 | 6 | 73.3 | 2412 |
| NE84581 | 17 | 65 | 1 | 2 | 151 | 184 | 79 | 1 | 5 | 2 | 73.3 | 2380 |
| NE82656 | 14 | 67 | 1 | 3 | 150 | 185 | 89 | 5 | 5 | 3 | 72.7 | 2356 |
| PI476975 | 3 | 59 | 1 | 2 | 149 | 184 | 74 | 16 | 1 | 2 | 73 | 2243 |
| MT8039 | 26 | 70 | 0 | 3 | 151 | 186 | 55 | 20 | 10 | 2 | 70.2 | 2223 |
| SD76463-16 | 5 | 72 | 2 | 3 | 151 | 185 | 76 | 5 | 50 | 2 | 74.2 | 2202 |
| SD82114 | 6 | 68 | 2 | 3 | 150 | 185 | 81 | 6 | 10 | 2 | 73.8 | 2198 |
| XH947 | 19 | 64 | 1 | 2 | 150 | 185 | 58 | 8 | 50 | 2 | 71.3 | 2183 |
| ND8286 | 11 | 71 | 1 | 3 | 153 | 187 | 98 | 9 | 10 | 1 | 72.6 | 2157 |
| ND8407 | 12 | 75 | 1 | 3 | 152 | 188 | 93 | 4 | 5 | 1 | 72 | 2155 |
| ND8215 | 10 | 74 | 1 | 2 | 153 | 187 | 84 | 3 | 5 | 2 | 69.7 | 2100 |
| SD82144 | 4 | 70 | 1 | 3 | 150 | 182 | 92 | 9 | 1 | 2 | 72.9 | 2098 |
| ND8212 | 9 | 71 | 1 | 2 | 154 | 186 | 94 | 22 | 1 | 2 | 69.5 | 2009 |
| ID0301 | 25 | 63 | 1 | 3 | 153 | 188 | 54 | 14 | 90 | 7 | 71.6 | 1982 |
| ID0180 | 24 | 66 | 1 | 3 | 155 | 188 | 66 | 14 | 90 | 3 | 70.8 | 1912 |
| SD791231 | 8 | 69 | 1 | 3 | 152 | 187 | 80 | 5 | 10 | 4 | 73.8 | 1900 |
| SD78207-4 | 7 | 68 | 1 | 3 | 152 | 191 | 90 | 3 | 20 | 3 | 73.9 | 1882 |
| WT176 | 21 | 73 | 2 | 4 | 155 | 189 | 77 | 6 | 90 | 2 | 70.7 | 1856 |
| CI17439 | 2 | 72 | 1 | 3 | 153 | 185 | 98 | 10 | 10 | 1 | 73 | 1851 |
| ND8460 | 13 | 75 | 1 | 3 | 153 | 188 | 74 | 2 | 10 | 2 | 73.6 | 1772 |
| WT179 | 23 | 71 | 1 | 3 | 155 | 189 | 83 | 6 | 10 | 2 | 71.9 | 1765 |
| CI1442 | 1 | 76 | 4 | 4 | 153 | 187 | 76 | 13 | 30 | 3 | 73.7 | 1755 |
| WT177 | 22 | 72 | 2 | 4 | 154 | 190 | 83 | 7 | 10 | 2 | 72.5 | 1752 |

Table 20. Seedling reaction of entries of the 1988 Northern Regional Performance Nursery to selected isolates of *Puccinia graminis* f.sp. *tritici* (by D. V. McVey, U.S.D.A., A.R.S., Cereal Rust Laboratory, U. of MN, St. Paul, MN).

| No. | Name or sel. no. | Reaction produced by isolates | | | | | | | | | | Spec. sr gene |
|-----|---------------------|-------------------------------|---------------------------|----------------------------|----------------------------|---------------------------|--------------------------|-----------------------------|-------|--|--------------|------------------|
| | | 72- 00- 1370C QFBS | 69- 21- 399 QSHS | 71- 21- 584B RHRS | 72- 25- 639C RKQS | 72- 00- 53A RTQQ | 72- 01- 4A TNMH | 74- 21- 1409A TNMK | 15B-2 | | | |
| 1 | Kharkof | s | s | s | s | s | s | s | s | | none | |
| 2 | Roughrider | ; | 0 | s | s | s | x | x | x | | 36 | |
| 3 | Colt | ; | 2 | 2 | 2- | ;1-n | ; | ; | ; | | 6,17,8,9a,11 | |
| 4 | SD82144 | 23 | 2 | 23 | s | ;1n+,s | ;s | s | s | | Seg.17,+ | |
| 5 | SD76463-16 | 2 | 2- | 2= | 2- | ; | ; | 2= | 2= | | 17,24 | |
| 6 | SD82114 | 2,; | 23 | 23 | 2 | ;1+n | ;s | 2,;,s | 2,;,s | | 10,Seg.6 + | |
| 7 | SD78207-4 | ; | ;s | 2- | -- | ; | ;s | s | s | | 8,17,36 | |
| 8 | SD791231 | ;1 | 2= | ;2- | ;1 | ;2- | 2-,; | ;2 | ;2 | | Seg.6&17 + | |
| 9 | ND8212 | ; | ; | 2 | 23 | 32 | ; | ; | ; | | 6,36,+ | |
| 10 | ND8215 | ;s | 23 | 23 | 23 | 32 | ; | ; | ; | | 6,+ | |
| 11 | ND8286 | ;1 | 0 | 2- | ;1 | 23 | x | x | x | | 36,+ | |
| 12 | ND8407 | ; | 2 | 2 | s | ;1n | ; | ; | ; | | 7b,8,6,17,+ | |
| 13 | ND8460 | ; | 0 | ; | ;1 | 2= | ;2- | ;2= | ;2= | | 11,36,Seg.6 | |
| 14 | NE82656 | ; | 1cn | 2= | 2- | ; | ; | ; | ; | | 6,17,24 | |
| 15 | NE82438 | ; | 2= | ;1- | ;1- | 2= | ; | ; | ; | | 6,24 | |
| 16 | NE83432 | ;1 | 2= | ;1- | 2= | 2= | 2=,s | 2= | 2= | | 24 &/or 31 | |
| 17 | NE84581 | ; | s | 2 | ;1n | ;1-n | ; | ; | ; | | 6,8,10,17 | |
| 18 | NA-81-362-5 | ;1 | 2= | ;1 | 2= | 2= | 2 | 2 | 2 | | + | |
| 19 | XH947 | ;s | 2-,s | s | 2,s | 2,s | ;1,s | x,s | x,s | | Seg.6,+ | |
| 20 | XNH1354 | s | s | s | s | s | s | s | s | | none | |
| 21 | WT176 | s | s | s | s | s | s | s | s | | none | |
| 22 | WT177 | 1 | 0 | 23 | x- | s | s | s | s | | 36 | |
| 23 | WT179 | s,;1 | 0,s | s | x | x | s | s | s | | Seg.36 | |
| 24 | ID0180 | 2 | 2= | 2 | 2 | 2- | s | s | s | | Temp | |
| 25 | ID0301 | 12n | s | s | ;1n | ;1n | s | s | s | | Sr 10 | |
| 26 | MT8039 | s | s | s | s | s | s | s | s | | none | |

n = necrosis

NA-81-362-5 = Abilene

Table 21. Adult plant field reaction of entries of the 1988 Northern Regional Performance Nursery to Puccinia graminis f.sp. tritici (by D. V. McVey, U.S.D.A., A.R.S., Cereal Rust Laboratory, U. of MN, St. Paul, MN).

| No. | Name or sel. no. | Stem rust | |
|-----|------------------|-----------|---------|
| | | 6/22 | 7/1 |
| 1 | Kharkof | TS | 30S |
| 2 | Roughrider | 0 | TS |
| 3 | Colt | 0 | 20MS |
| 4 | SD82144 | 0 | 5MR |
| 5 | SD76463-16 | 0 | 0 |
| 6 | SD82114 | 0 | 0 |
| 7 | SD78207-4 | 0 | 10MR-MS |
| 8 | SD791231 | 0 | 20MS |
| 9 | ND8212 | 0 | TMR |
| 10 | ND8215 | 0 | 10MS-S |
| 11 | ND8286 | 0 | TMR |
| 12 | ND8407 | 0 | 10MS |
| 13 | ND8460 | 0 | TR |
| 14 | NE82656 | 0 | TR |
| 15 | NE82438 | 0 | 10MR |
| 16 | NE83432 | 0 | 30MR-MS |
| 17 | NE84581 | 0 | 0 |
| 18 | NA-81-362-5 | TR | TR |
| 19 | XH947 | 0 | TR |
| 20 | XNH1354 | 30S | 60S |
| 21 | WT176 | 30S | 40S |
| 22 | WT177 | TS | TS |
| 23 | WT179 | 0 | TR |
| 24 | ID0180 | TS | 40S |
| 25 | ID0301 | 20S | 60S |
| 26 | MT8039 | 20S | 30S |

Table 22. Hessian fly reaction, Great Plains biotype,
1988 Northern Regional Performance Nursery.
(Data provided by J. H. Hatchett, USDA-ARS,
Manhattan, KS.)

| ENTRY NO. | C.I. OR SEL. NO. | REACTION TYPE | NO. OF PLANTS | |
|--------------|---------------------|------------------|---------------|----|
| | | | R | S |
| 1 | CI1442 | H | 5 | 19 |
| 2 | CI17439 | H | 4 | 21 |
| 3 | PI476975 | H | 19 | 5 |
| 4 | SD82144 | S | | |
| 5 | SD76463-16 | S | | |
| 6 | SD82114 | H | 6 | 17 |
| 7 | SD78207-4 | S | | |
| 8 | SD791231 | H | 5 | 18 |
| 9 | ND8212 | S | | |
| 10 | ND8215 | S | | |
| 11 | ND8286 | H | 15 | 12 |
| 12 | ND8407 | H | 15 | 15 |
| 13 | ND8460 | S | | |
| 14 | NE82656 | H | 25 | 4 |
| 15 | NE82438 | H | 18 | 5 |
| 16 | NE83432 | S | | |
| 17 | NE84581 | S | | |
| 18 | NA-81-362-5 | S | | |
| 19 | XH947 | S | | |
| 20 | XNH1354 | S | | |
| 21 | WT176 | S | | |
| 22 | WT177 | R | | |
| 23 | WT179 | S | | |
| 24 | ID0180 | S | | |
| 25 | ID0301 | S | | |
| 26 | MT8039 | S | | |

Table 23. Virus reactions of entries in the 1988 Northern Regional Performance Nursery. (Data provided by A. D. Hewings and F. L. Kolb, Urbana, Illinois.)

| ENTRY NO. | C.I. OR SEL. NO. | : BARLEY YELLOW : | : SOILBORNE : | Rep 1 | Rep 2 |
|--------------|---------------------|-------------------|---------------|-------|-------|
| | | : DWARF : | : MOSAIC : | | |
| | | : 0-9 : | : 0-9 : | | |
| 1 | CI1442 | 4 | 7 | 7 | |
| 2 | CI17439 | 5 | 7 | 7 | |
| 3 | PI476975 | 2 | 6 | 7 | |
| 4 | SD82144 | 2 | 8 | 8 | |
| 5 | SD76463-16 | 6 | 8 | 8 | |
| 6 | SD82114 | 4 | 8 | 9 | |
| 7 | SD78207-4 | 7 | 6 | 7 | |
| 8 | SD791231 | 7 | 6 | 7 | |
| 9 | ND8212 | 3 | 7 | 7 | |
| 10 | ND8215 | 7 | 8 | 8 | |
| 11 | ND8286 | 6 | 8 | 7 | |
| 12 | ND8407 | 4 | 8 | 7 | |
| 13 | ND8460 | 6 | 3 | 3 | |
| 14 | NE82656 | 7 | 6 | 7 | |
| 15 | NE82438 | 6 | 5 | 6 | |
| 16 | NE83432 | 6 | 8 | 8 | |
| 17 | NE84581 | 3 | 4 | 5 | |
| 18 | NA-81-362-5 | 6 | 3 | 3 | |
| 19 | XH947 | 4 | 7 | 7 | |
| 20 | XNH1354 | 7 | 6 | 7 | |
| 21 | WT176 | 3 | 6 | 5 | |
| 22 | WT177 | 5 | 7 | 8 | |
| 23 | WT179 | 7 | 7 | 7 | |
| 24 | ID0180 | 3 | 8 | 8 | |
| 25 | ID0301 | 8 | 7 | 8 | |
| 26 | MT8039 | 6 | 3 | 4 | |

Table 24. Aluminum tolerance of lines tested in the 1988 NRPN based on hematoxylin staining of seedling roots. (Data provided by B. F. Carver, Stillwater, OK)

| Entry No. | Selection No. | Stain Intensity ^a | | | Rating ^b |
|-----------|---------------|------------------------------|------|------|---------------------|
| | | Al Concentration (mM) | | | |
| | | 0.18 | 0.36 | 0.72 | |
| 1 | Kharkof | C/P | C | C | VS-MS* |
| 2 | Roughrider | C | C | C | VS |
| 3 | Colt | P | C | C | MS |
| 4 | SD82144 | P/C | C/P | C | VS-I* |
| 5 | SD76463-16 | C/P | C | C | VS-MS* |
| 6 | SD82114 | C/P/N | C/P | C/P | VS-T* |
| 7 | SD78207-A | C | C | C | VS |
| 8 | SD791231 | C/P | C/P | C | VS-I* |
| 9 | ND8212 | C | C | C | VS |
| 10 | ND8215 | C | C | C | VS |
| 11 | ND8286 | C | C | C | VS |
| 12 | ND8407 | N | P | P | T |
| 13 | ND8460 | C | C | C | VS |
| 14 | NE82656 | P | C | C | MS |
| 15 | NE82438 | C/P | C | C | VS-MS* |
| 16 | NE83432 | P | C | C | MS |
| 17 | NE84581 | P | P | C | I |
| 18 | NA-81-362-5 | P | P/C | C | MS-I* |
| 19 | XH947 | C/P | C/P | C | VS-I* |
| 20 | XNH1354 | C | C | C | VS |
| 21 | WT176 | N | P | P/C | I-T* |
| 22 | WT177 | N | N | P | T |
| 23 | WT179 | N/C | C/P | C/P | VS-T* |
| 24 | ID0180 | N | P | P/C | I-T* |
| 25 | ID0301 | C | C | C | VS |
| 26 | MT8039 | P | P | C | I |

^aC, P, and N = complete, partial, and no staining of root tips, respectively.

^bVS = very susceptible, MS = moderately susceptible, I = intermediate and T = tolerant (≤ 0.72 mM Al); * = heterogeneous response; predominant stain intensity listed first for each Al concentration.

QUALITY DATA

Composites of 1-lb samples of each SRPN and NRPN entry from each harvested nursery site are evaluated at the Hard Red Winter Wheat Quality Laboratory at Manhattan, Kansas. Results are reported to cooperators by the laboratory and are not included in this report.

UNIFORM WINTERHARDINESS NURSERIES

The nurseries are comprised of Southern and Northern Materials Sections. In 1988 the Southern Section contained 141 entries and the Northern Section 114 entries. Nursery lists and survival data from test sites at which differential winter survival occurred appear in the tabulations that follow.

SOIL-BORNE MOSAIC NURSERY

The nursery contained 99 entries in 1988. Infection data were reported from Urbana, IL, Lincoln, NE and Manhattan, KS. The nursery list and reaction data are included herein.

1988
Uniform Winterhardiness Nursery
Southern Section

| <u>Entry No.</u> | <u>Variety or Pedigree</u> | <u>Sel. No.</u> | <u>Source</u> |
|------------------|--|-----------------|---------------|
| 1 | Warrior | CI13190 | Check |
| 2 | HiPlains/Wings/3/Parker*4/Agent//Belot.198/Lcr | NE82438 | Nebraska |
| 3 | CIMMYT/Scout//Agate/Sage Sib | NE82533 | " |
| 4 | Brule/3/Parker*4/Agent//Belot.198/Lcr | NE82656 | " |
| 5 | CIMMYT/Scout//Bennett Sib/4/Parker 4*/Agent// Belot.198/Lcr/3/Bez 1/Ctk 78 | NE83404 | " |
| 6 | " " | NE83406 | " |
| 7 | " " | NE83407 | " |
| 8 | Wrr*5/Agent//Kavkaz/4/Parker*4/Agent// Belot.198/Lcr/3/Vona | NE83498 | " |
| 9 | Wrr/Sut//MoW6811/3/Agate Sib/4/NE68457/Ctk78 | NE84557 | " |
| 10 | Scout 66 | CI13996 | Check |
| 11 | Bez 1/Ctk78//Arthur/Ctk78/3/Bennett | NE84581 | Nebraska |
| 12 | (FNT/MI/Hope)//Pnc/2*Cnn/3/Pnc/3*Cnn/4/ Pnc/2*Cnn//ILL#1-CNS-TT1/Sando60/5/Vona/6/ Wrr*5/Agent//Kavkaz | NE83432 | " |
| 13 | 78GH1051 x Mara/2*Sut//Sentine1 (NE74649) | NE85556 | " |
| 14 | 84MC22 | NE85623 | " |
| 15 | Wrr*5/Agent//Kavkaz NE77637xNE63218//Ky58/ Nth/2*(CTMH) (NE61983)//Pnc/2*Cnn | NE85707 | " |
| 16 | Wrr*5/Agent//NE69441 NE76667xNewton | NE86482 | " |
| 17 | Colt/3/Wrr*5/Agent//Kavkaz | NE86487 | " |
| 18 | " " | NE86488 | " |
| 19 | " " | NE86494 | " |
| 20 | Vona | CI17441 | Check |
| 21 | Colt/Cody | NE86499 | Nebraska |
| 22 | " | NE86501 | " |
| 23 | " | NE86502 | " |
| 24 | " | NE86503 | " |
| 25 | " | NE86507 | " |
| 26 | " | NE86509 | " |
| 27 | Colt Sib NE78697/3/Wrr*5/Agent//Kavkaz | NE86527 | " |
| 28 | Colt/Cody | NE86582 | " |
| 29 | Colt//Bez 1/Ctk78//Arthur/Ctk78 | NE86592 | " |
| 30 | Warrior | CI13190 | Check |
| 31 | Wrr/Sut//MoW6811//Agate Sib NE77615//Cody | NE86606 | Nebraska |
| 32 | " " | NE86607 | " |
| 33 | CLLF/Sturdy/3/Diba/Diga//Suwon92/CI13645 /4/NE7060 | NE87U101 | " |
| 34 | 6TA131/Dwf Sel 6TA131//Fain Tc1 Sel/Ctk78 | NE83T12 | " |
| 35 | Fain Tc1/Ctk78 x Ctk78/6A35/NE69150 x TxTc1#50 //NE69150/S-339//TxTc1#50 x NE69150 x Tc1 6TA876 | NE86T666 | " |
| 36 | H15A13333/3/5*Larned/Eagle//Sage/4/TAM105 | KS87H6 | Kansas (Hays) |
| 37 | " " | KS87H15 | " |
| 38 | " " | KS87H22 | " |
| 39 | " " | KS87H57 | " |
| 40 | Scout 66 | CI13996 | Check |

| | | | |
|----|--|--------------|----------------|
| 41 | H15A13333/3/5*Larned/Eagle//Sage/4/TAM105 | KS87H58 | Kansas (Hays) |
| 42 | GHP2 X211 | KS87H63 | " |
| 43 | " | KS87H64 | " |
| 44 | " | KS87H65 | " |
| 45 | " | KS87H66 | " |
| 46 | " | KS87H67 | " |
| 47 | H15A13333/3/5*Larned/Eagle//Sage/4/Dodge sib | KS87H264 | " |
| 48 | Agent/Tascosa//Sturdy | TX71D4876-V5 | Texas (Dallas) |
| 49 | Amigo/TX71A106-5 | TX82D4751 | " |
| 50 | Vona | CI17441 | Check |
| 51 | TX75D3165/Amigo | TX84D1265 | Texas (Dallas) |
| 52 | Victory//Payne/Len | TX86D1305 | " |
| 53 | Thunderbird//Norseman/Collin | TX86D1308 | " |
| 54 | Thunderbird//Payne/Collin | TX86D1310 | " |
| 55 | TX71C8130-R/Veery #4 | TX86D1613 | " |
| 56 | Bulk Selection | Thunderbird | NAPB |
| 57 | OK11252A/W79-1226 | Abilene | " |
| 58 | Experimental Line | XW163 | Pioneer |
| 59 | " | HBV261B | " |
| 60 | Warrior | CI13190 | Check |
| 61 | Experimental Line | HBV756A | Pioneer |
| 62 | " | HBV762A | " |
| 63 | " | HBV383A | " |
| 64 | " | HBV385D | " |
| 65 | Kharkof | CI1442 | Check |
| 66 | Scout 66 | CI13996 | " |
| 67 | TAM-105 | CI17826 | " |
| 68 | Aurora/2*TAM W-101 | OK84343 | Oklahoma |
| 69 | Payne*2/C0725052 | OK84286 | " |
| 70 | Scout 66 | CI13996 | Check |
| 71 | " " | OK84287 | Oklahoma |
| 72 | Hawk/OK80099 | OK86197 | " |
| 73 | OK79257/Century Sib/2/Chisholm | OK86215 | " |
| 74 | TAM W-101*4/Amigo*4//Largo | TXGH10989 | Texas |
| 75 | Sturdy*3/Amigo | TX81V6582-2 | " |
| 76 | TAM-105*4/Amigo*4//Largo | TXGH10563B | " |
| 77 | KS73146/TX71A1039 | TX84V1336 | " |
| 78 | TX71A562-6*4/Amigo*4//Largo | TXGH13622 | " |
| 79 | TX71A374-4/TX71A1039-V1 | TX84V1317 | " |
| 80 | Vona | CI17441 | Check |
| 81 | TX71A1039-V1*3/Amigo | TX81V6607-2 | Texas |
| 82 | TAM-106 resel./TX69D4819 | TX84V1736 | " |
| 83 | TAM-108/Arkan | TX86A7041 | " |
| 84 | Rannaya/NE701136//CI13449/Ctk | TX86V1109 | " |
| 85 | " " | TX86V1110 | " |
| 86 | 74F878/Wings//Vona | C082009 | Colorado |
| 87 | 74cb462/Trapper//Vona | C0830027 | " |
| 88 | C05926//7C/Tobari 63/3/Baca | C0830034 | " |
| 89 | 74cb452/Vona//Baca | C0830014 | " |
| 90 | Warrior | CI13190 | Check |

| | | | |
|-----|---|--------------|---------------|
| 91 | Bison/Sterling//3*Scout/3/Eagle/4/ Pinnacle/2*Eagle | KS84HW196 | Kansas |
| 92 | Bulk Selection | KS82C2338 | " |
| 93 | KS73167/Agate//Sage sib | NE82533 | Nebraska |
| 94 | Wrr/Sut//MoW6811/3/Agate Sib/4/NE68457/Ctk78 | NE84557 | " |
| 95 | CIMMYT/Scout//Bennett Sib/4/Parker*4/Agent //Belot.198/Lcr/3/Bez 1/Ctk78 | NE83407 | " |
| 96 | Brule/3/Parker*4/Agent//Belot.198/Lcr | NE82656 | " |
| 97 | Winter Wheat Line | RL844677 | Rohm & Haas |
| 98 | Winter Wheat Line | RL845472 | " |
| 99 | HRW Selection | AGC-112 | Seed Research |
| 100 | Scout 66 | CI13996 | Check |
| 101 | " " | AGC-113 | Seed Research |
| 102 | Bezostaya/TAM W-101//W558 | XW141 | Pioneer |
| 103 | TAM W-101/W603//W558 | XW161 | " |
| 104 | Winter Wheat Hybrid | XH675 | HybriTech |
| 105 | " " | XH685 | " |
| 106 | Bounty Hybrid Wheat | Bounty-122 | Cargill |
| 107 | " " | WH180001 | " |
| 108 | W79-227/Payne | NA-W84-229 | NAPB |
| 109 | Payne/W78-069 | NA-W83-256 | " |
| 110 | Vona | CI17441 | Check |
| 111 | OK11252A/W79-1226 | NA-W81-162-W | NAPB |
| 112 | IL77-4259/IL76-3845 | IL83-7439 | Illinois |
| 113 | TX69A330/IL76-3820 | IL80-1251 | " |
| 114 | CHA Hybrid Mustang/3/T-105*4/Amigo*4//Largo, TXGH10289 | TX87HA1 | Texas |
| 115 | (7C-CNO/Cal.)/Baca//Vona | C0820026 | Colorado |
| 116 | 74F878/Wings//Vona | C0820009 | " |
| 117 | 74CB452/Vona//Baca | C0830014 | " |
| 118 | 74cb462/Trapper//Vona | C0830027 | " |
| 119 | Mir.808/Vona | C0840015 | " |
| 120 | Warrior | CI13190 | Check |
| 121 | Mir.808/Vona | C0840016 | Colorado |
| 122 | " | C0840032 | " |
| 123 | Newton/Baca//Vona | C0840050 | " |
| 124 | Newton/Baca//Newton | C0840062 | " |
| 125 | (CLLF2/Pch)/Vona//Tpr | C0840111 | " |
| 126 | Emy/Ctk//Sandy/3/Vona | C0840136 | " |
| 127 | NS14/NS603//Nwt/3/PB835 | C0850034 | " |
| 128 | NS14/NS25//2*Vona | C0850060 | " |
| 129 | Buck Buck "s"/NA434//Vona | C0850104 | " |
| 130 | Scout 66 | CI13996 | Check |
| 131 | F51/F71//77F50362/3/Vona | C0850166 | Colorado |
| 132 | Bez 1/Sava//Ctk/3/C0710125 | C0850202 | " |
| 133 | NS14/NS83//Tpr/3/Vona | C0850213 | " |
| 134 | Buck Buck "s"/Ctk//Vona | C0850246 | " |
| 135 | F16/F71//Nwt/3/Vona | C0850260 | " |
| 136 | Ka1/Bb//Cj71"s"/3/Hork "s"/4/77F50362/5/Vona | C0850267 | " |
| 137 | Veery "s"/Vona//Pb835 | C0850273 | " |
| 138 | Siouxland Composite | TXSLD | Texas |
| 139 | Siouxland | SXLD | Nebraska |
| 140 | Winter Wheat Line | RH7846 | Rohm & Haas |
| 141 | Vona | CI17441 | Check |

1988 Uniform Winterhardiness Nursery
Southern Section

| Entry | Casselton, ND | | Highmore, SD | | St. Paul, MN | | Mead, NE | |
|------------------------|---------------|-------|--------------|-------|--------------|-------|----------|-------|
| | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| ----- % survival ----- | | | | | | | | |
| 1 | 80 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 2 | 80 | 70 | 100 | 100 | 100 | 100 | 100 | 100 |
| 3 | 70 | 20 | 100 | 100 | 100 | 100 | 100 | 100 |
| 4 | 80 | 80 | 100 | 100 | 100 | 100 | 100 | 100 |
| 5 | 80 | 70 | 100 | 100 | 100 | 100 | 100 | 100 |
| 6 | 85 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 7 | 85 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 8 | 80 | 75 | 100 | 80 | 100 | 100 | 100 | 100 |
| 9 | 60 | 50 | 100 | 100 | 100 | 100 | 100 | 100 |
| 10 | 85 | 60 | 100 | 100 | 100 | 100 | 100 | 100 |
| 11 | 80 | 55 | 100 | 100 | 100 | 100 | 100 | 100 |
| 12 | 90 | 60 | 100 | 100 | 100 | 100 | 100 | 100 |
| 13 | 75 | 5 | 100 | 100 | 100 | 100 | 100 | 100 |
| 14 | 30 | 20 | 100 | 100 | 100 | 100 | 90 | 90 |
| 15 | 85 | 60 | 100 | 100 | 100 | 100 | 100 | 100 |
| 16 | 75 | 40 | 100 | 100 | 100 | 100 | 100 | 100 |
| 17 | 80 | 30 | 100 | 100 | 100 | 100 | 100 | 100 |
| 18 | 75 | 0 | 100 | 100 | 100 | 100 | 100 | 100 |
| 19 | 75 | 10 | 100 | 100 | 100 | 100 | 100 | 100 |
| 20 | 45 | 10 | 100 | 100 | 100 | 100 | 100 | 100 |
| 21 | 60 | 50 | 100 | 100 | 100 | 100 | 100 | 100 |
| 22 | 55 | 50 | 100 | 100 | 100 | 100 | 100 | 100 |
| 23 | 50 | 60 | 100 | 100 | 100 | 100 | 100 | 100 |
| 24 | 60 | 70 | 100 | 100 | 100 | 100 | 100 | 100 |
| 25 | 65 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 26 | 60 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 27 | 40 | 70 | 100 | 100 | 100 | 100 | 100 | 100 |
| 28 | 35 | 70 | 100 | 100 | 100 | 100 | 100 | 100 |
| 29 | 50 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 30 | 75 | 80 | 100 | 100 | 100 | 100 | 100 | 100 |
| 31 | 60 | 60 | 100 | 100 | 100 | 100 | 100 | 100 |
| 32 | 65 | 60 | 100 | 100 | 100 | 100 | 100 | 100 |
| 33 | 45 | 50 | 100 | 100 | 100 | 100 | 100 | 100 |
| 34 | 40 | 55 | 100 | 100 | 100 | 100 | 100 | 100 |
| 35 | 30 | 60 | 100 | 100 | 100 | 100 | 100 | 100 |
| 36 | 60 | 60 | 100 | 100 | 100 | 100 | 100 | 90 |
| 37 | 65 | 70 | 100 | 100 | 100 | 100 | 100 | 100 |
| 38 | 65 | 60 | 100 | 100 | 100 | 100 | 100 | 100 |
| 39 | 40 | 60 | 100 | 100 | 100 | 100 | 100 | 100 |
| 40 | 65 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 41 | 40 | 80 | 100 | 100 | 100 | 100 | 100 | 100 |
| 42 | 75 | 80 | 100 | 100 | 100 | 100 | 100 | 100 |
| 43 | 45 | 85 | 100 | 100 | 100 | 100 | 100 | 100 |
| 44 | 50 | 85 | 100 | 100 | 100 | 100 | 100 | 100 |
| 45 | 70 | 85 | 100 | 100 | 100 | 100 | 100 | 100 |
| 46 | 0 | 30 | 100 | 100 | 100 | 100 | 100 | 100 |
| 47 | 0 | 45 | 100 | 100 | 100 | 100 | 100 | 100 |
| 48 | 5 | 55 | 100 | 100 | 100 | 100 | 90 | 100 |
| 49 | 5 | 55 | 100 | 40 | 100 | 100 | 90 | 80 |

1988 UWHN, Southern Section

| Entry | Casselton, ND | | Highmore, SD | | St. Paul, MN | | Mead, NE | |
|------------------------|---------------|-------|--------------|-------|--------------|-------|----------|-------|
| | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| ----- % survival ----- | | | | | | | | |
| 50 | 10 | 60 | 100 | 100 | 100 | 100 | 100 | 100 |
| 51 | 5 | 20 | 100 | 100 | 100 | 100 | 50 | 40 |
| 52 | 5 | 90 | 100 | 100 | 100 | 100 | 100 | 100 |
| 53 | 0 | 20 | 100 | 100 | 0 | 15 | 20 | 20 |
| 54 | 5 | 85 | 100 | 60 | 100 | 100 | 100 | 100 |
| 55 | 0 | 70 | 100 | 90 | 0 | 15 | 70 | 60 |
| 56 | 20 | 90 | 100 | 100 | 100 | 100 | 100 | 100 |
| 57 | 15 | 90 | 100 | 100 | 100 | 100 | 100 | 100 |
| 58 | 10 | 90 | 100 | 100 | 100 | 100 | 100 | 100 |
| 59 | 15 | 95 | 100 | 100 | 100 | 100 | 100 | 100 |
| 60 | 70 | 95 | 100 | 100 | 100 | 100 | 100 | 100 |
| 61 | 75 | 95 | 100 | 100 | 100 | 100 | 100 | 100 |
| 62 | 50 | 90 | 100 | 100 | 100 | 100 | 100 | 100 |
| 63 | 30 | 90 | 100 | 100 | 100 | 100 | 100 | 100 |
| 64 | 30 | 90 | 100 | 100 | 100 | 100 | 100 | 100 |
| 65 | 45 | 90 | 100 | 100 | 100 | 100 | 100 | 100 |
| 66 | 50 | 90 | 100 | 100 | 100 | 100 | 100 | 100 |
| 67 | 30 | 80 | 100 | 100 | 100 | 100 | 100 | 100 |
| 68 | 0 | 60 | 100 | 100 | 100 | 100 | 80 | 80 |
| 69 | 20 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 70 | 55 | 90 | 100 | 100 | 100 | 100 | 100 | 100 |
| 71 | 50 | 85 | 100 | 100 | 100 | 100 | 100 | 100 |
| 72 | 50 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 73 | 60 | 70 | 100 | 100 | 100 | 100 | 100 | 100 |
| 74 | 0 | 20 | 30 | 100 | 0 | 50 | 80 | 80 |
| 75 | 5 | 40 | 30 | 100 | 100 | 100 | 90 | 100 |
| 76 | 75 | 80 | 100 | 100 | 100 | 100 | 100 | 100 |
| 77 | 60 | 30 | 100 | 100 | 100 | 100 | 80 | 100 |
| 78 | 45 | 60 | 100 | 100 | 100 | 100 | 90 | 100 |
| 79 | 0 | 55 | 100 | 100 | 100 | 100 | 100 | 100 |
| 80 | 20 | 55 | 100 | 100 | 100 | 100 | 100 | 100 |
| 81 | 0 | 40 | 100 | 100 | 100 | 100 | 70 | 80 |
| 82 | 10 | 70 | 100 | 100 | 100 | 100 | 100 | 100 |
| 83 | 10 | 70 | 100 | 100 | 100 | 100 | 100 | 100 |
| 84 | 10 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 85 | 10 | 80 | 100 | 100 | 100 | 100 | 100 | 100 |
| 86 | 0 | 80 | 100 | 100 | 0 | 7 | 100 | 100 |
| 87 | 0 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 88 | 0 | 80 | 100 | 100 | 100 | 100 | 100 | 100 |
| 89 | 0 | 45 | 100 | 100 | 100 | 100 | 70 | 100 |
| 90 | 30 | 90 | 100 | 100 | 100 | 100 | 100 | 100 |
| 91 | 5 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 92 | 5 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 93 | 30 | 80 | 100 | 90 | 100 | 100 | 100 | 100 |
| 94 | 40 | 85 | 100 | 90 | 100 | 100 | 100 | 100 |
| 95 | 80 | 90 | 100 | 100 | 100 | 100 | 100 | 100 |
| 96 | 85 | 95 | 100 | 100 | 100 | 100 | 100 | 100 |
| 97 | 50 | 85 | 100 | 100 | 100 | 100 | 100 | 100 |
| 98 | 70 | 90 | 100 | 100 | 100 | 100 | 100 | 100 |
| 99 | 75 | 95 | 100 | 100 | 100 | 100 | 100 | 100 |

1988 UWHN, Southern Section

| Entry | Casselton, ND | | Highmore, SD | | St. Paul, MN | | Mead, NE | |
|------------------------|---------------|-------|--------------|-------|--------------|-------|----------|-------|
| | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| ----- % survival ----- | | | | | | | | |
| 100 | 75 | 95 | 100 | 100 | 100 | 100 | 100 | 100 |
| 101 | 20 | 85 | 100 | 100 | 100 | 100 | 100 | 90 |
| 102 | 45 | 85 | 90 | 100 | 100 | 100 | 100 | 90 |
| 103 | 45 | 85 | 100 | 100 | 100 | 100 | 100 | 100 |
| 104 | 50 | 85 | 100 | 100 | 100 | 100 | 100 | 100 |
| 105 | 40 | 85 | 100 | 100 | 100 | 100 | 100 | 100 |
| 106 | 0 | 70 | 100 | 100 | 100 | 100 | 100 | 100 |
| 107 | 0 | 70 | 100 | 100 | 100 | 100 | 90 | 90 |
| 108 | 0 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 109 | 40 | 90 | 100 | 100 | 100 | 100 | 100 | 100 |
| 110 | 10 | 80 | 20 | 100 | 100 | 100 | 100 | 100 |
| 111 | 10 | 80 | 100 | 100 | 100 | 100 | 100 | 100 |
| 112 | 80 | 95 | 100 | 100 | 100 | 100 | 100 | 100 |
| 113 | 75 | 95 | 100 | 100 | 100 | 100 | 100 | 100 |
| 114 | 75 | 95 | 100 | 100 | 100 | 100 | 100 | 100 |
| 115 | 50 | 90 | 50 | 100 | 100 | 100 | 100 | 100 |
| 116 | 10 | 85 | 100 | 100 | 100 | 100 | 100 | 100 |
| 117 | 5 | 70 | 100 | 100 | 100 | 100 | 90 | 100 |
| 118 | 0 | 70 | 90 | 100 | 100 | 100 | 100 | 100 |
| 119 | 10 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 120 | 75 | 95 | 100 | 100 | 100 | 100 | 100 | 100 |
| 121 | 5 | 25 | 100 | 100 | 100 | 100 | 100 | 90 |
| 122 | 20 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 123 | 0 | 70 | 100 | 100 | 100 | 100 | 100 | 100 |
| 124 | 0 | 70 | 100 | 100 | 100 | 100 | 100 | 100 |
| 125 | 5 | 70 | 100 | 100 | 100 | 100 | 100 | 100 |
| 126 | 0 | 60 | 100 | 100 | 100 | 100 | 100 | 100 |
| 127 | 0 | 60 | 100 | 100 | 100 | 100 | 100 | 100 |
| 128 | 0 | 50 | 100 | 30 | 100 | 100 | 100 | 100 |
| 129 | 0 | 70 | 100 | 100 | 100 | 100 | 100 | 100 |
| 130 | 30 | 80 | 100 | 100 | 100 | 100 | 100 | 100 |
| 131 | 0 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 132 | 0 | 75 | 100 | 100 | 100 | 100 | 100 | 100 |
| 133 | 5 | 85 | 100 | 100 | 100 | 100 | 100 | 100 |
| 134 | 0 | 50 | 100 | 100 | 100 | 100 | 90 | 100 |
| 135 | 0 | 65 | 100 | 100 | 100 | 100 | 100 | 100 |
| 136 | 0 | 60 | 100 | 100 | 100 | 100 | 100 | 100 |
| 137 | 0 | 70 | 100 | 100 | 100 | 100 | 100 | 100 |
| 138 | 50 | 85 | 100 | 100 | 100 | 100 | 100 | 100 |
| 139 | 60 | 85 | 100 | 100 | 100 | 100 | 100 | 100 |
| 140 | 5 | 50 | 100 | 100 | 100 | 100 | 100 | 100 |
| 141 | 5 | 50 | 100 | 100 | 100 | 100 | 100 | 100 |

1988
Uniform Winterhardiness Nursery
Northern Section

| <u>Entry No.</u> | <u>Variety or Pedigree</u> | <u>Sel. No.</u> | <u>Source</u> |
|------------------|----------------------------|-----------------|---------------|
| 1 | Norstar | CI17735 | Check |
| 2 | NE7763//Ctk/ND7777 | ND8501 | No. Dakota |
| 3 | SD74221//Frd/ND7712 | ND8511 | " |
| 4 | Translocation C/CI8888 | ND8523 | " |
| 5 | ND7601//Ctk/ND7601 | ND8530 | " |
| 6 | ND7723//Rrr/ND7620 | ND8536 | " |
| 7 | Ctk/ND7637//Ctk/ND7655 | ND8581 | " |
| 8 | ND7735-11//Wnk/Newton | ND8585 | " |
| 9 | ND7735-4//Rrr/Solar | ND8589 | " |
| 10 | Warrior | CI13190 | Check |
| 11 | ND7735-28/Siouxland | ND85100 | No. Dakota |
| 12 | " " | ND85103 | " |
| 13 | ND7735-34/KS79379 | ND85105 | " |
| 14 | ND7735-34/KS79346 | ND85111 | " |
| 15 | " | ND85114 | " |
| 16 | ND7735-38/KS79379 | ND85118 | " |
| 17 | ND7620/Siouxland | ND85137 | " |
| 18 | ND7882/Rose | ND8603 | " |
| 19 | SD75314/MT7431 | ND8626 | " |
| 20 | Centurk 78 | CI17724 | Check |
| 21 | ND7714/SD75314 | ND8638 | No. Dakota |
| 22 | " | ND8640 | " |
| 23 | " | ND8645 | " |
| 24 | ND7771/SD75284 | ND8651 | " |
| 25 | ND7771/Rrr | ND8654 | " |
| 26 | " | ND8655 | " |
| 27 | ND7731/Siouxland | ND8660 | " |
| 28 | Ctk/ND78103 | ND8664 | " |
| 29 | Rose/ND7481 | ND8677 | " |
| 30 | Norstar | CI17735 | Check |
| 31 | Rose/ND7481 | ND8679 | No. Dakota |
| 32 | SD73177/ND7703 | ND8683 | " |
| 33 | SD75284/Siouxland | ND8692 | " |
| 34 | " | ND8694 | " |
| 35 | " | ND8698 | " |
| 36 | ND7659/Agate | ND86105 | " |
| 37 | ND7611/Rrr | ND86120 | " |
| 38 | Rrr/NK76W239 | ND86136 | " |
| 39 | Winalta/ND7637 | ND86140 | " |
| 40 | Warrior | CI13190 | Check |
| 41 | Winoka | SDM8127 | So. Dakota |
| 42 | " | SDM16029 | " |
| 43 | " | SDM16050 | " |
| 44 | " | SDM16069 | " |
| 45 | " | SDM16085 | " |

| | | | |
|-----|--|------------|------------|
| 46 | Winoka | SDM16091 | So. Dakota |
| 47 | " | SDM16116 | " |
| 48 | " | SDM16129 | " |
| 49 | " | SDM16132 | " |
| 50 | Centurk 78 | CI17724 | Check |
| 51 | Winoka | SDM16149 | So. Dakota |
| 52 | " | SDM16156 | " |
| 53 | " | SDM16166 | " |
| 54 | " | SDM16169 | " |
| 55 | " | SDM16187 | " |
| 56 | " | SDM16208 | " |
| 57 | " | SDM17011 | " |
| 58 | " | SDM17021 | " |
| 59 | " | SDM17025 | " |
| 60 | Norstar | CI17735 | Check |
| 61 | Winoka | SDM17032 | So. Dakota |
| 62 | " | SDM17033 | " |
| 63 | " | SDM17055 | " |
| 64 | " | SDM17074 | " |
| 65 | " | SDM17083 | " |
| 66 | " | SDM17087 | " |
| 67 | " | SDM17088 | " |
| 68 | Winoka | Winoka | " |
| 69 | ID0033/PR04930//Mld/Lind | SD87123 | " |
| 70 | Warrior | CI13190 | Check |
| 71 | ID0033/PR04930//Mld/Lind | SD87124 | So. Dakota |
| 72 | " | SD87125 | " |
| 73 | " | SD87126 | " |
| 74 | Nwt/SD56281 | SD87127 | " |
| 75 | " | SD87128 | " |
| 76 | " | SD87131 | " |
| 77 | Sage/Art//BTY309/2*Rri | SD87138 | " |
| 78 | " | SD87140 | " |
| 79 | Lcr/Frd//NE69559/Wnk/3/Ne11 | SD87143 | " |
| 80 | Centurk 78 | CI17724 | Check |
| 81 | Lcr/Cnn//YT0-117-20/Ctk/3/A1ab | SD87145 | So. Dakota |
| 82 | Sage/Art//Hp1/ND7747 | SD87148 | " |
| 83 | Lco/Frd//NE69559/Wnk*4/3/TX71A30 | SD87155 | " |
| 84 | Lcr/Cnn//YT0117-20/Ctk/3/Nwt | SD87141 | " |
| 85 | Kharkof | CI1442 | Check |
| 86 | Roughrider | CI17439 | " |
| 87 | Colt | PI476975 | " |
| 88 | CI15322//Agate/4*Scout 66/3/Ctk 78/4/SD74221 | SD82144 | So. Dakota |
| 89 | CI15322//3*(Agent/4*Scout66) | SD76463-16 | " |
| 90 | Norstar | CI17735 | Check |
| 91 | SD74221*2/Lathrop | SD82114 | So. Dakota |
| 92 | SD76109/Rose | SD78207-4 | " |
| 93 | SD76669*2/KS71591 | SD791231 | " |
| 94 | Rrr//Yogo/Trapper | ND8212 | No. Dakota |
| 95 | Rrr/3/Froid//Winoka/WW8 | ND8215 | " |
| 96 | Rrr*2/1809 | ND8286 | " |
| 97 | Ctk/3/Froid*2//ND363/ND269 | ND8407 | " |
| 98 | Rrr/F0.1527 | ND8460 | " |
| 99 | Brule/3/Parker*4/Agent//Belot.198/Lcr | NE82656 | Nebraska |
| 100 | Warrior | CI13190 | Check |

| | | | |
|-----|---|-------------|------------|
| 101 | HiPlains/Wings/3/Pkr*4/Agent//Belot.198/Lcr | NE82438 | Nebraska |
| 102 | (FTN/MI/Hope)//Pnc/2*Cnn/3/Pnc/3*Cnn/4/ Pnc/2*Cnn//ILL#1-Cns-TTi (CTMH)/ Sando60/5/Vona/6/Wrr*5/Agent//Kavkaz | NE83432 | " |
| 103 | Bez 1/Ctk78//Arthur/Ctk78/3/Bennett | NE84581 | " |
| 104 | OK11252A/W76-1226 (Abilene) | NA-81-362-5 | NAPB |
| 105 | Winter Wheat Hybrid | XH947 | HybriTech |
| 106 | " " | XNH1354 | " |
| 107 | Kharkov 22 MC/Bezostaya 1 | WT176 | Lethbridge |
| 108 | Norstar/Rrr | WT177 | " |
| 109 | " " | WT179 | " |
| 110 | Centurk 78 | CI17724 | Check |
| 111 | Turkey/Burt//Bezostaya 1 | ID0180 | Lethbridge |
| 112 | Hg1/ID5006/4/II-60-156/CI14107//It/3/ 2Cnn/PI178383 | ID0301 | Idaho |
| 113 | Lancota/Froid//NE69559/Wnk | MT8039 | Montana |
| 114 | Norstar | CI17735 | Check |

1988 Uniform Winterhardiness Nursery
Northern Section

| Entry | Casselton, ND | | Highmore, SD | |
|-------|------------------------|-------|--------------|-------|
| | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| | ----- % Survival ----- | | | |
| 1 | 95 | 75 | 100 | 100 |
| 2 | 80 | 75 | 100 | 100 |
| 3 | 85 | 85 | 100 | 100 |
| 4 | 90 | 80 | 100 | 100 |
| 5 | 80 | 75 | 100 | 100 |
| 6 | 80 | 75 | 100 | 100 |
| 7 | 75 | 80 | 100 | 100 |
| 8 | 85 | 90 | 100 | 100 |
| 9 | 90 | 90 | 100 | 100 |
| 10 | 85 | 75 | 100 | 100 |
| 11 | 80 | 80 | 100 | 100 |
| 12 | 75 | 85 | 100 | 100 |
| 13 | 80 | 95 | 100 | 100 |
| 14 | 75 | 95 | 100 | 100 |
| 15 | 80 | 95 | 100 | 100 |
| 16 | 80 | 95 | 100 | 100 |
| 17 | 80 | 90 | 100 | 90 |
| 18 | 75 | 90 | 100 | 100 |
| 19 | 70 | 90 | 90 | 100 |
| 20 | 30 | 90 | 100 | 100 |
| 21 | 75 | 90 | 100 | 100 |
| 22 | 75 | 90 | 100 | 100 |
| 23 | 80 | 80 | 100 | 100 |
| 24 | 75 | 80 | 100 | 100 |
| 25 | 85 | 80 | 100 | 100 |
| 26 | 90 | 90 | 100 | 100 |
| 27 | 75 | 90 | 100 | 100 |
| 28 | 60 | 85 | 100 | 100 |
| 29 | 70 | 80 | 100 | 100 |
| 30 | 80 | 85 | 100 | 100 |
| 31 | 90 | 80 | 100 | 100 |
| 32 | 85 | 80 | 100 | 100 |
| 33 | 45 | 80 | 100 | 100 |
| 34 | 70 | 80 | 100 | 100 |
| 35 | 70 | 80 | 100 | 100 |
| 36 | 75 | 80 | 100 | 100 |
| 37 | 90 | 90 | 100 | 100 |
| 38 | 90 | 85 | 100 | 100 |
| 39 | 90 | 90 | 100 | 100 |
| 40 | 85 | 85 | 100 | 100 |
| 41 | 80 | 85 | 100 | 100 |
| 42 | 70 | 80 | 100 | 100 |
| 43 | 75 | 80 | 100 | 100 |
| 44 | 75 | 80 | 100 | 100 |
| 45 | 60 | 75 | 100 | 100 |
| 46 | 40 | 75 | 100 | 100 |
| 47 | 40 | 70 | 100 | 100 |
| 48 | 35 | 85 | 100 | 100 |
| 49 | 25 | 70 | 100 | 100 |

1988 UWHN, Northern Section

| Entry | Casselton, ND | | Highmore, SD | |
|-------|------------------------|-------|--------------|-------|
| | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| | ----- % Survival ----- | | | |
| 50 | 20 | 60 | 100 | 100 |
| 51 | 20 | 60 | 70 | 100 |
| 52 | 25 | 65 | 100 | 100 |
| 53 | 10 | 60 | 100 | 100 |
| 54 | 10 | 50 | 100 | 100 |
| 55 | 10 | 60 | 100 | 90 |
| 56 | 15 | 55 | 100 | 100 |
| 57 | 30 | 50 | 100 | 100 |
| 58 | 10 | 50 | 100 | 100 |
| 59 | 5 | 15 | 100 | 100 |
| 60 | 95 | 80 | 100 | 100 |
| 61 | 10 | 30 | 100 | 100 |
| 62 | 10 | 15 | 40 | 100 |
| 63 | 5 | 20 | 30 | 100 |
| 64 | 10 | 45 | 80 | 100 |
| 65 | 0 | 35 | 100 | 100 |
| 66 | 0 | 35 | 100 | 100 |
| 67 | 0 | 25 | 100 | 100 |
| 68 | 10 | 60 | 100 | 100 |
| 69 | 30 | 45 | 100 | 100 |
| 70 | 25 | 45 | 100 | 100 |
| 71 | 40 | 45 | 100 | 100 |
| 72 | 40 | 50 | 100 | 100 |
| 73 | 45 | 40 | 100 | 100 |
| 74 | 30 | 40 | 100 | 100 |
| 75 | 20 | 40 | 100 | 100 |
| 76 | 10 | 55 | 100 | 100 |
| 77 | 5 | 80 | 100 | 100 |
| 78 | 15 | 80 | 100 | 100 |
| 79 | 60 | 80 | 100 | 100 |
| 80 | 45 | 75 | 100 | 100 |
| 81 | 15 | 75 | 100 | 100 |
| 82 | 30 | 75 | 100 | 100 |
| 83 | 85 | 80 | 100 | 100 |
| 84 | 75 | 80 | 100 | 100 |
| 85 | 75 | 85 | 100 | 100 |
| 86 | 80 | 90 | 100 | 100 |
| 87 | 70 | 60 | 100 | 100 |
| 88 | 70 | 75 | 100 | 100 |
| 89 | 60 | 80 | 100 | 100 |
| 90 | 85 | 95 | 100 | 100 |
| 91 | 45 | 85 | 90 | 100 |
| 92 | 60 | 85 | 100 | 100 |
| 93 | 50 | 80 | 100 | 100 |
| 94 | 60 | 90 | 100 | 100 |
| 95 | 75 | 90 | 100 | 100 |
| 96 | 80 | 95 | 100 | 100 |
| 97 | 30 | 95 | 100 | 100 |
| 98 | 10 | 75 | 80 | 100 |
| 99 | 5 | 80 | 90 | 100 |

1988 UWHN, Northern Section

| Entry | Casselton, ND | | Highmore, SD | |
|-------|------------------------|-------|--------------|-------|
| | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| | ----- % Survival ----- | | | |
| 100 | 35 | 85 | 100 | 100 |
| 101 | 30 | 90 | 100 | 100 |
| 102 | 75 | 90 | 100 | 100 |
| 103 | 65 | 80 | 100 | 100 |
| 104 | 70 | 70 | 100 | 100 |
| 105 | 60 | 55 | 100 | 100 |
| 106 | 65 | 60 | 100 | 100 |
| 107 | 90 | 90 | 100 | 100 |
| 108 | 85 | 90 | 100 | 100 |
| 109 | 90 | 95 | 100 | 100 |
| 110 | 25 | 35 | 100 | 100 |
| 111 | 85 | 60 | 100 | 100 |
| 112 | 75 | 55 | 100 | 100 |
| 113 | 75 | 50 | 100 | 100 |
| 114 | 90 | 95 | 100 | 100 |

1988
Soilborne Mosaic Nursery

| <u>Entry No.</u> | <u>Variety or Pedigree</u> | <u>Sel. No.</u> | <u>Source</u> |
|------------------|--|-----------------|---------------|
| 1 | Pawnee | CI11669 | Check |
| 2 | HiPlains/Wings/3/Parker*4/Agent//Belot.198/Lcr | NE82438 | Nebraska |
| 3 | CIMMYT/Scout//Agate/Sage Sib | NE82533 | " |
| 4 | Brule/3/Parker*4/Agent//Belot.198/Lcr | NE82656 | " |
| 5 | CIMMYT/Scout//Bennett Sib/4/Parker 4*/Agent// Belot.198/Lcr/3/Bez 1/Ctk 78 | NE83404 | " |
| 6 | " " | NE83406 | " |
| 7 | " " | NE83407 | " |
| 8 | Wrr*5/Agent//Kavkaz/4/Parker*4/Agent// Belot.198/Lcr/3/Vona | NE83498 | " |
| 9 | Wrr/Sut//MoW6811/3/Agate Sib/4/NE68457/Ctk78 | NE84557 | " |
| 10 | Concho | CI12517 | Check |
| 11 | Bez 1/Ctk78//Arthur/Ctk78/3/Bennett | NE84581 | Nebraska |
| 12 | (FNT/MI/Hope)//Pnc/2*Cnn/3/Pnc/3*Cnn/4/ Pnc/2*Cnn//ILL#1-CNS-TT1/Sando60/5/Vona/6/ Wrr*5/Agent//Kavkaz | NE83432 | " |
| 13 | 78GH1051 x Mara/2*Sut//Sentinel (NE74649) | NE85556 | " |
| 14 | 84MC22 | NE85623 | " |
| 15 | Wrr*5/Agent//Kavkaz NE77637xNE63218//Ky58/ Nth/2*(CTMH) (NE61983)//Pnc/2*Cnn | NE85707 | " |
| 16 | Wrr*5/Agent//NE69441 NE76667xNewton | NE86482 | " |
| 17 | Colt/3/Wrr*5/Agent//Kavkaz | NE86487 | " |
| 18 | " " | NE86488 | " |
| 19 | " " | NE86494 | " |
| 20 | Bison | CI12518 | Check |
| 21 | Colt/Cody | NE86499 | Nebraska |
| 22 | " | NE86501 | " |
| 23 | " | NE86502 | " |
| 24 | " | NE86503 | " |
| 25 | " | NE86507 | " |
| 26 | " | NE86509 | " |
| 27 | Colt Sib NE78697/3/Wrr*5/Agent//Kavkaz | NE86527 | " |
| 28 | Colt/Cody | NE86582 | " |
| 29 | Colt//Bez 1/Ctk78//Arthur/Ctk78 | NE86592 | " |
| 30 | Pawnee | CI11669 | Check |
| 31 | Wrr/Sut//MoW6811//Agate Sib NE77615//Cody | NE86606 | Nebraska |
| 32 | " " | NE86607 | " |
| 33 | CLLF/Sturdy/3/Diba/Diga//Suwon92/CI13645 /4/NE7060 | NE87U101 | " |
| 34 | H15A13333/3/5*Larned/Eagle//Sage/4/TAM105 | KS87H6 | Kansas (Hays) |
| 35 | " " | KS87H15 | " |
| 36 | " " | KS87H22 | " |
| 37 | " " | KS87H57 | " |
| 38 | " " | KS87H58 | " |
| 39 | GHP2 X211 | KS87H63 | " |
| 40 | Concho | CI12517 | Check |

| | | | |
|----|---|--------------|---------------|
| 41 | GHP2 X211 | KS87H64 | Kansas (Hays) |
| 42 | " | KS87H65 | " |
| 43 | " | KS87H66 | " |
| 44 | " | KS87H67 | " |
| 45 | H15A13333/3/5*Larned/Eagle//Sage/4/Dodge sib | KS87H264 | " |
| 46 | Experimental Line | XW163 | Pioneer |
| 47 | " | YW171 | " |
| 48 | " | HBV261B | " |
| 49 | " | HBV756A | " |
| 50 | Bison | CI12518 | Check |
| 51 | Experimental Line | HBV762A | Pioneer |
| 52 | " | HBV383A | " |
| 53 | " | HBV385D | " |
| 54 | " | HBV517A | " |
| 55 | " | W2439G | " |
| 56 | " | HBV262F | " |
| 57 | W79-227/Payne | NA-W84-229 | NAPB |
| 58 | OK11252A/W79-1226 | NA-W81-162 | " |
| 59 | Payne/W78-069 | NA-W83-256-W | " |
| 60 | Pawnee | CI11669 | Check |
| 61 | II18889/Tpr//C0652643/3/Baca | Hawk | NAPB |
| 62 | SN/Tpr//Wrr/3/II18889/Tpr//C0652643 | Mustang | " |
| 63 | Payne*2/C0725052 | OK84286 | Oklahoma |
| 64 | " | OK84287 | " |
| 65 | Hawk/OK80099 | OK86197 | " |
| 66 | OK79257/Century Sib/2/Chisholm | OK86215 | " |
| 67 | TAM-106 resel./TX69D4819 | TX84V1736 | Texas |
| 68 | TAM-108/Arkan | TX86A7041 | " |
| 69 | Rannaya/NE701136//CI13449/Ctk | TX86V1109 | " |
| 70 | Concho | CI12517 | Check |
| 71 | Rannaya/NE701136//CI13449/Ctk | TX86V1110 | Texas |
| 72 | 74cb452/Vona//Baca | C0830014 | Colorado |
| 73 | Winter Wheat Line | RL844677 | Rohm & Haas |
| 74 | Winter Wheat Line | RL845472 | " |
| 75 | HRW Selection | AGC-112 | Seed Research |
| 76 | " | AGC-113 | " |
| 77 | TAM W-101/W603//W558 | XW161 | Pioneer |
| 78 | Winter Wheat Hybrid | XH675 | HybriTech |
| 79 | " | XH685 | " |
| 80 | Bison | CI12518 | Check |
| 81 | " | WH180001 | Cargill |
| 82 | IL77-4259/IL76-3845 | IL83-7439 | Illinois |
| 83 | TX69A330/IL76-3820 | IL80-1251 | " |
| 84 | CHA Hybrid Mustang/3/T-105*4/Amigo*4//Largo, TXGH10287 | TX87HA1 | Texas |
| 85 | Rrr/FO.1527 | ND8460 | No. Dakota |
| 86 | (FTN/MI/Hope)//Pnc/2*Cnn/3/Pnc/3*Cnn/4/ Pnc/2*Cnn//ILL#1-Cns-TTi (CTMH)/ Sando60/5/Vona/6/Wrr*5/Agent//Kavkaz | NE83432 | Nebraska |
| 87 | Winter Wheat Hybrid | XH947 | Hybritech |
| 88 | " | XNH1354 | " |
| 89 | Hg1/ID5006/4/II-60-156/CI14107//It/3/ 2Cnn/PI178383 | ID0301 | Idaho |
| 90 | Pawnee | CI11669 | Check |

| | | | |
|----|------------------------------|--------------|----------------|
| 91 | Winter Wheat Line | RH7846 | Rohm & Haas |
| 92 | Agent/Tascosa//Sturdy | TX71D4876-V5 | Texas (Dallas) |
| 93 | Amigo/TX71A106-5 | TX82D4751 | " |
| 94 | TX75D3165/Amigo | TX84D1265 | " |
| 95 | Victory//Payne/Len | TX86D1305 | " |
| 96 | Thunderbird//Norseman/Collin | TX86D1308 | " |
| 97 | Thunderbird//Payne/Collin | TX86D1310 | " |
| 98 | TX71C8130-R/Veery #4 | TX86D1613 | " |
| 99 | Concho | CI12517 | Check |

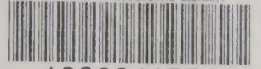
1988 SOILBORNE MOSAIC NURSERY
Disease Scores

| Entry | Urbana, IL | | Lincoln, NE | | Manhattan, KS | |
|-------|-------------|-------|---------------|-------|---------------|-------|
| | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| | --- 0-9 --- | | ---- 0-5 ---- | | --- R-S --- | |
| 1 | 7 | 6 | 3 | 3.5 | S | S |
| 2 | 6 | 3 | 3 | 4 | S | S |
| 3 | 5 | 4 | 3 | 2.5 | R | R |
| 4 | 5 | 5 | 4 | 4 | MS | S |
| 5 | 6 | 7 | 4 | 4 | S | S |
| 6 | 7 | 7 | 4 | 4 | S | S |
| 7 | 6 | 7 | 3.5 | 4 | S | S |
| 8 | 6 | 7 | 3.5 | 4 | S | S |
| 9 | 8 | 6 | 4 | 3.5 | R | R |
| 10 | 3 | 4 | 2 | 2.5 | R | R |
| 11 | 4 | 4 | 2 | 3 | R | R |
| 12 | 8 | 8 | 4 | 4 | R | R |
| 13 | 8 | 7 | 3 | 3.5 | S | S |
| 14 | 5 | 4 | 1 | 2 | R | R |
| 15 | 7 | 6 | 4 | 3.5 | R | R |
| 16 | 6 | 5 | 4 | 4 | R | R |
| 17 | 8 | 7 | 4 | 4 | MS | S |
| 18 | 7 | 7 | 4 | 4 | S | S |
| 19 | 6 | 6 | 4 | 4 | S | S |
| 20 | 6 | 6 | 3.5 | 3.5 | S | MS |
| 21 | 6 | 6 | 3 | 3.5 | MS | MS |
| 22 | 5 | 5 | 3.5 | 4 | MS | MR |
| 23 | 5 | 6 | 4 | 4 | MS | MR |
| 24 | 7 | 7 | 4 | 4 | MR | MR |
| 25 | 6 | 6 | 3.5 | 3.5 | MR | MR |
| 26 | 7 | 7 | 4 | 3.5 | MS | MR |
| 27 | 8 | 7 | 4 | 4 | S | MS |
| 28 | 6 | 8 | 4 | 3.5 | R | R |
| 29 | 7 | 7 | 3.5 | 3.5 | R | R |
| 30 | 7 | 7 | 3.5 | 3.5 | MS | MR |
| 31 | 7 | 7 | 3.5 | 3.5 | R | R |
| 32 | 7 | 7 | 3.5 | 3.5 | R | R |
| 33 | 7 | 7 | 4 | 4 | R | MR |
| 34 | 8 | 7 | 3.5 | 3.5 | R | MR |
| 35 | 8 | 8 | 3.5 | 3 | R | MR |
| 36 | 8 | 8 | 4 | 3.5 | S | S |
| 37 | 8 | 8 | 3.5 | 3.5 | S | S |
| 38 | 8 | 8 | 3.5 | 4 | S | S |
| 39 | 7 | 7 | 3.5 | 3.5 | MR | R |
| 40 | 4 | 2 | 2 | 1 | R | R |
| 41 | 6 | 7 | 3 | 3 | MS | MS |
| 42 | 6 | 7 | 3.5 | 3 | R | R |
| 43 | 4 | 6 | 3.5 | 3 | R | R |
| 44 | 5 | 6 | 3 | 3 | R | R |
| 45 | 6 | 4 | 2.5 | 2.5 | R | R |
| 46 | 4 | 4 | 3 | 2 | R | R |
| 47 | 4 | 3 | 1 | 2.5 | R | R |
| 48 | 3 | 2 | 1 | 2 | MS | MS |
| 49 | 4 | 2 | 1 | 2 | S | S |

1988 Soilborne Mosaic Nursery

| Entry | Urbana, IL | | Lincoln, NE | | Manhattan, KS | |
|-------|-------------|-------|---------------|-------|---------------|-------|
| | Rep 1 | Rep 2 | Rep 1 | Rep 2 | Rep 1 | Rep 2 |
| | --- 0-9 --- | | ---- 0-5 ---- | | --- R-S --- | |
| 50 | 7 | 7 | 4 | 4 | S | S |
| 51 | 3 | 3 | 2 | 2.5 | MR | R |
| 52 | 3 | 2 | 2 | 2.5 | R | R |
| 53 | 3 | 2 | 1 | 2 | R | R |
| 54 | 6 | 5 | 4 | 4 | S | S |
| 55 | 5 | 3 | 2 | 3 | MR | R |
| 56 | 4 | 3 | 2.5 | 3 | R | R |
| 57 | 6 | 8 | 1 | 3 | R | R |
| 58 | 3 | 3 | 2 | 3 | R | R |
| 59 | 4 | 6 | 3.5 | 4 | R | R |
| 60 | 6 | 7 | 4 | 4 | S | S |
| 61 | 2 | 3 | 1 | 1.5 | R | R |
| 62 | 6 | 7 | 3 | 2 | MR | MR |
| 63 | 7 | 8 | 4 | 3.5 | S | S |
| 64 | 7 | 8 | 4 | 4 | S | S |
| 65 | 2 | 3 | 2.5 | 3 | R | R |
| 66 | 8 | 9 | 4 | 3 | S | S |
| 67 | 9 | 9 | 4 | 4 | S | S |
| 68 | 8 | 7 | 4 | 3.5 | S | S |
| 69 | 7 | 3 | 4 | 3.5 | S | S |
| 70 | 2 | 7 | 3 | 2 | R | R |
| 71 | 7 | 7 | 4 | 4 | S | S |
| 72 | 9 | 8 | 4 | 4 | S | S |
| 73 | 5 | 5 | 3 | 2 | R | R |
| 74 | 7 | 7 | 4 | 4 | S | S |
| 75 | 7 | 8 | 4 | 4 | MS | MS |
| 76 | 2 | 4 | 3 | 3 | R | R |
| 77 | 3 | 3 | 3 | 3 | R | R |
| 78 | 7 | 7 | 3 | 3 | R | R |
| 79 | 6 | 5 | 4 | 3.5 | R | R |
| 80 | 8 | 8 | 4 | 4 | MS | S |
| 81 | 5 | 8 | 3.5 | 3.5 | MR | MS |
| 82 | 6 | 6 | 4 | 4 | MS | S |
| 83 | 7 | 6 | 3.5 | 4 | S | S |
| 84 | 6 | 7 | 3 | 3 | R | R |
| 85 | 2 | 6 | 2.5 | 2 | R | R |
| 86 | 7 | 3 | 4 | 4 | S | S |
| 87 | 6 | 8 | 4 | 3.5 | R | R |
| 88 | 6 | 7 | 4 | 3.5 | S | S |
| 89 | 7 | 7 | 4 | 3.5 | S | S |
| 90 | 7 | 7 | 3.5 | 3.5 | MS | S |
| 91 | 4 | 4 | 2 | 1 | R | R |
| 92 | 7 | 7 | 4 | 4 | S | S |
| 93 | 9 | 9 | 4 | 4 | S | S |
| 94 | 8 | 8 | 4 | 4.5 | S | S |
| 95 | 4 | 5 | 3 | 2.5 | R | R |
| 96 | - | - | 2.5 | 3.5 | R | R |
| 97 | 7 | 6 | 2.5 | 2.5 | R | R |
| 98 | - | 7 | 4 | 4 | S | S |
| 99 | 4 | 4 | 3 | 2 | R | R |

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